SAMSUNG TECHWIN

Samsung Security Manager

User Manual

SAMSUNG

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INTRODUCTION ON SAMSUNG SECURITY MANAGER

Samsung Security Manager is an application software that enables the accessing and controlling Samsung's network devices from a remote PC.
Using this program, you may access and control your network devices via the Internet from anywhere, as well as monitoring connected camera.
It provides users with remote access and playback/search an environment for remote monitoring that employs ease and effectiveness.

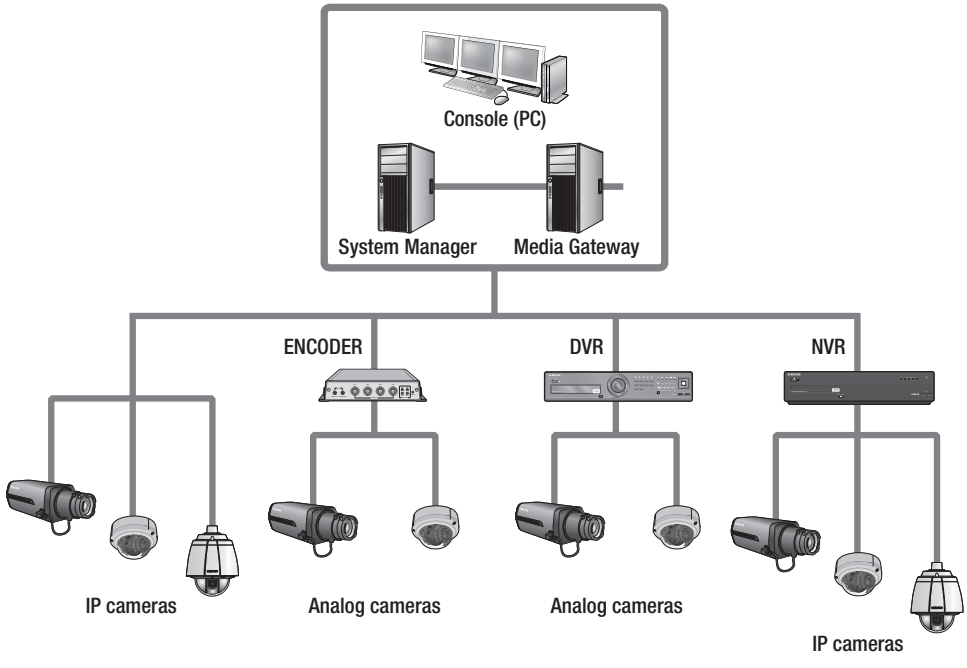
Samsung Security Manager Structure Overview

Samsung Security Manager consists of a Console "the client application" and the Server programs that include the System Manager and Media Gateway.

- Console : Console provides monitoring and controlling user interface.
- System Manager : System Manager provides administration on all devices and users of the system.
- Media Gateway : Media Gateway's role is as the centralized relay server for the transmitting of video, PTZ control and events.

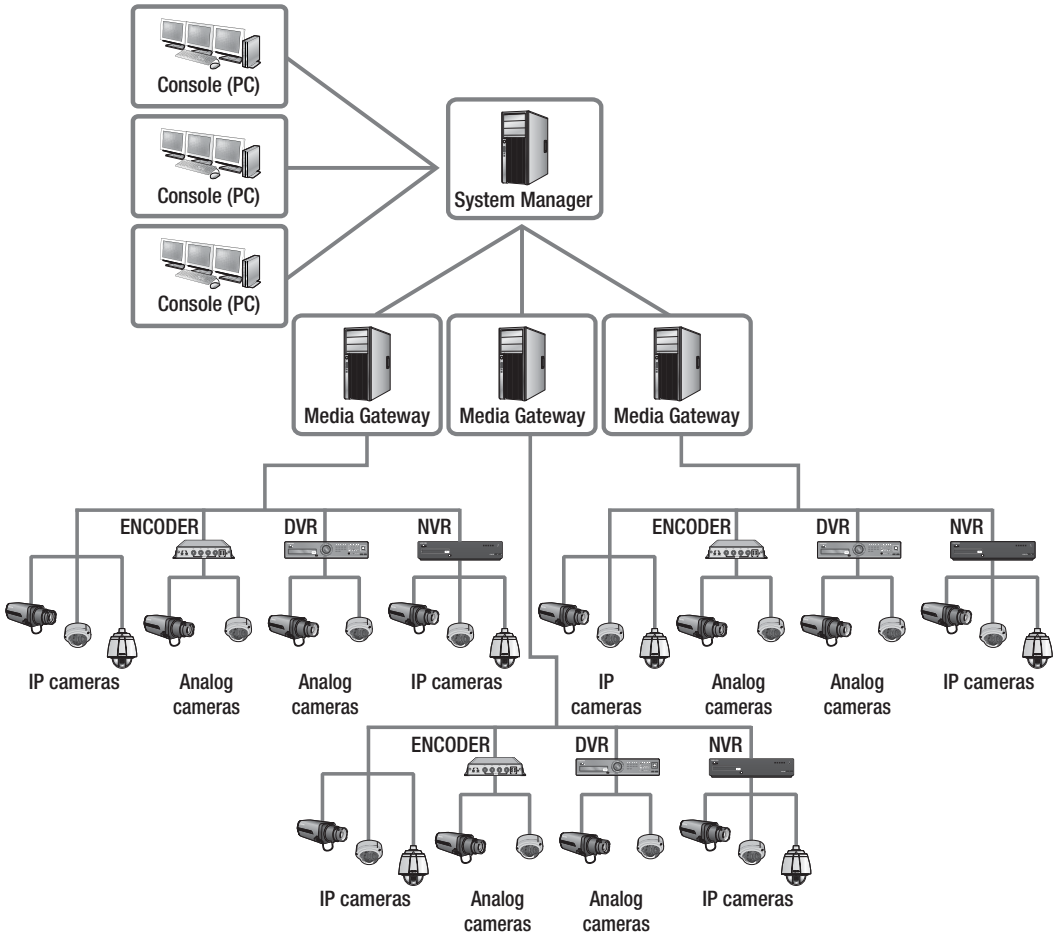
Standalone type

All server components Installed onto one computer.



Multi type

In case of distributed installation of the System Manager, Media Gateway and Console on multiple computers:



Supported Products

DVR

SRD-1670(D/DC)/1650(D/DC)/870(D/DC)/850(D/DC)/470(D)/440, SRD-1630(D)/1610(D)/830(D), SRD-1652D/852D, SRD-480D, SVR-1670/3200/1680(C)/1660(C)/1645/960(C)/945/480, SHR-2000/5000/6000/7000/8000 series, SVR-1650E/1640A/950E, SRD-1640/840/1641P/841P, SRD-442

Network Camera

SNB-7000/5000/3000/2000/1000/1001/3002, SNZ-5200, SNO-7080R/5080R/1080R, SNC-B2335/B2331/M300/1300/550/570, SND-7080/5080(F)/3080(F)/3080C(F)/1010/1080/1011/3082, SNV-7080/5080/3080/5010/3120/5080R/3082/1080/1080R, SND-560/460V, SNC-B5368/B5399, SNP-5200(H)/3430H/3370(TH)/3301(H)/3120(V/VH)/3302(H), SNC-C6225/C7225/C7478, SNP-3300A/1000A/3750/3350, SNB-5001/7001/7002

NVR

SRN-6450/3250, SNR-6400/3200, SRN-1670D/470D, SRN-1671, SNS-SF064/032/016/008/004, SRN-1000

Encoder

SPE-400/100/101, SPE-1600R, SNS-400/100

Controller

SPC-2000

System Requirements

Item	Minimum	Recommended
CPU	Intel Core 2 Duo 2.83 GHz	Intel i7 (Sandy bridge)
RAM	2 GB or more	4 GB or more
HDD	More than 20 GB of free space for installation - For operation, the system log database requires 10 GB or more free space.	
VGA Memory	512 MB or more	1 GB or more
OS	Console : Windows XP 32bit, Windows 7 32bit, Windows 7 64bit System Manager, Media Gateway : Windows XP 32bit, Windows 7 32bit, Windows 7 64bit, Windows Server 2003, Windows Server 2008	

Configurable monitoring systems according to the system performance:

- Minimum Specifications : Allows access to 16 channels, with monitoring 16 channels at CIF resolution.
- Recommended Specifications : Allows access to 64 channels, with monitoring 64 channels at 4CIF resolution.

MAIN FEATURES SAMSUNG SECURITY MANAGER

- Live Viewer
  - Supports simultaneous video display of up to 64 monitoring tiles per monitor, maximum 4 monitors for 100 monitoring tiles
  - One footage file can save up to 1 hours worth of video
  - Supports full-screen mode
  - Place video feed at any desired tile using drag-n-drop
  - A simple double-click adds a video feed to the video screen
  - Supports sequenced automatic source switching
- Event Viewer
  - Provides search function for events and real-time logs
  - Provides 1-channel playback for events
  - Provides methods of acknowledging, recording, and search on an event
- Search Viewer
  - Up to 16 videos can be played simultaneously
  - Supports periodic backup (self-executable footage)
  - Search by event types and play video data recorded by DVR
- Schedule Backup
  - Video feeds from the registered recording device are backed up by a PC
  - Configurable schedule for backup
- Settings
  - Management features for user's login account and privilege based accessibility
  - Supports device grouping for access control
  - Supports exporting device configuration onto a file
  - SSM Console configuration can be saved as a file
- Updating
  - Supports remote updating of software using update server

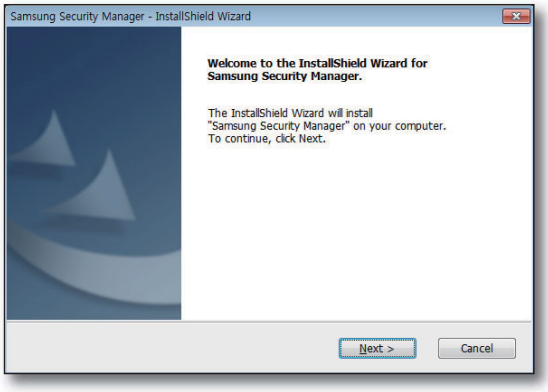
TERMS FREQUENTLY USED

- Tree : Display area that shows a list of registered objects and their hierarchy.
- Context Menu : Pop-up menus that appears when right mouse button is clicked.
- Device : Includes DVR, NVR, Video Server, and Network Camera.
- Tile : Unit screen cell that displays video.
- Object : Means device, camera, site, layout, alarm and other entities.
- SSM : Abbreviation of Samsung Security Manager.

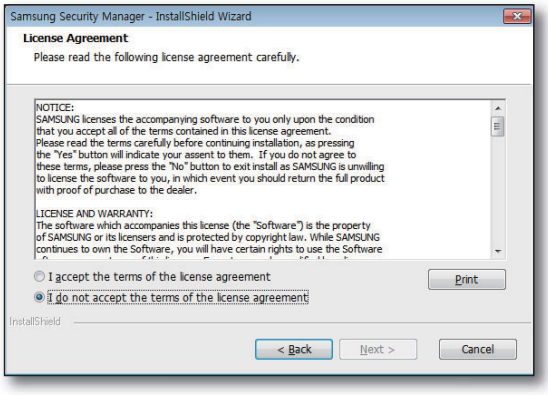
INSTALLATION

Run the Samsung Security Manager installer program on a local PC to install the Samsung Security Manager. Software installation requires about 20 minutes, depending on installation conditions.

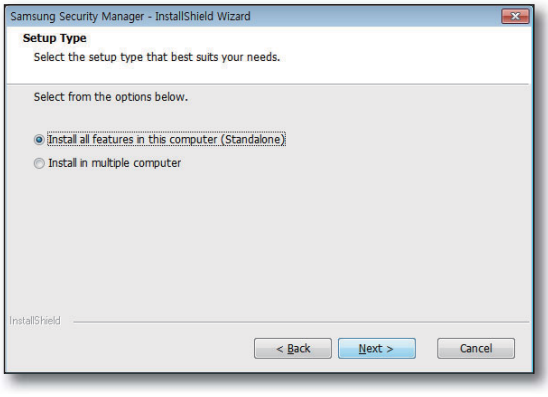
1. Use provided CD or download and run Samsung Security Manager installer, "**SSM_vx.xx_xxxxxx.exe**".
2. When the installation screen appears, click [**Next >**] button.


Samsung Security Manager - InstallShield Wizard
Welcome to the InstallShield Wizard for Samsung Security Manager.
The InstallShield Wizard will install "Samsung Security Manager" on your computer. To continue, click Next.
Next >
Cancel

3. Check license agreement and then click [**Next >**] button to proceed to the next step.

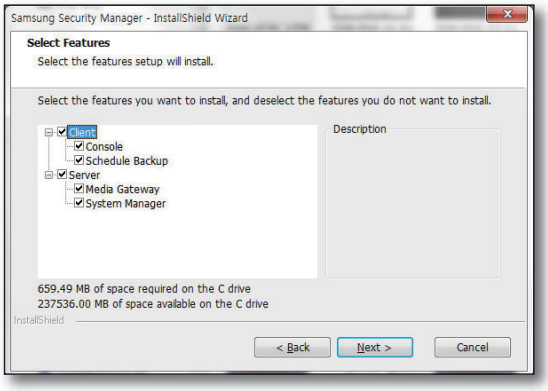

Samsung Security Manager - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
NOTICE:
SAMSUNG licenses the accompanying software to you only upon the condition that you accept all of the terms contained in this license agreement.
Please read the terms carefully before continuing installation, as pressing the "Yes" button will indicate your assent to them. If you do not agree to these terms, please press the "No" button to exit install as SAMSUNG is unwilling to license the software to you, in which event you should return the full product with proof of purchase to the dealer.
LICENSE AND WARRANTY:
The software which accompanies this license (the "Software") is the property of SAMSUNG or its licensers and is protected by copyright law. While SAMSUNG continues to own the Software, you will have certain rights to use the Software
I accept the terms of the license agreement
I do not accept the terms of the license agreement
Print
InstallShield
< Back
Next >
Cancel

4. Choose whether to install all or partial components.
   - Install all features in this computer (Standalone) : System Manager, Console and Media Gateway are installed on a single computer.


Samsung Security Manager - InstallShield Wizard
Setup Type
Select the setup type that best suits your needs.
Select from the options below.
Install all features in this computer (Standalone)
Install in multiple computer
InstallShield
< Back
Next >
Cancel

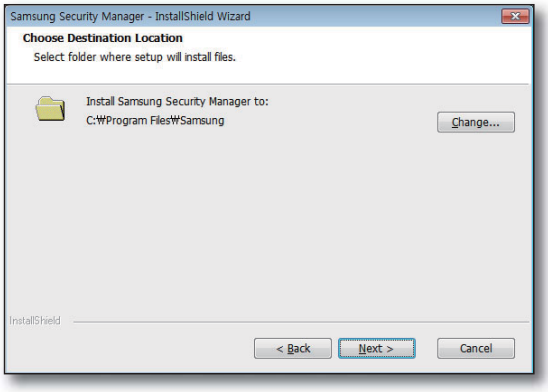
- Install in multiple computer : Installs only selected components of System Manager / Console / Media Gateway onto the PC.

  ▪ For information on complete structure according to the installation type, refer to "**Samsung Security Manager Structure Overview**". (Page 4)

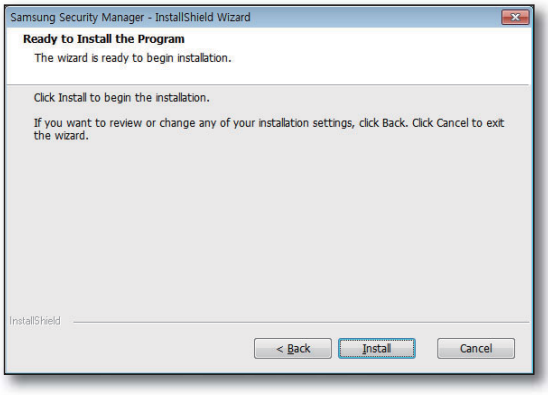

Samsung Security Manager - InstallShield Wizard
Select Features
Select the features setup will install.
Select the features you want to install, and deselect the features you do not want to install.
Client
Console
Schedule Backup
Server
Media Gateway
System Manager
Description
659.49 MB of space required on the C drive
237536.00 MB of space available on the C drive
InstallShield
< Back
Next >
Cancel

5. Specify the folder path to save the installation program. By default, it is set to "**C:₩Program Files₩Samsung**".
   - To change the path, click [**Change...**] button and enter the desired path directly or browse to select one.

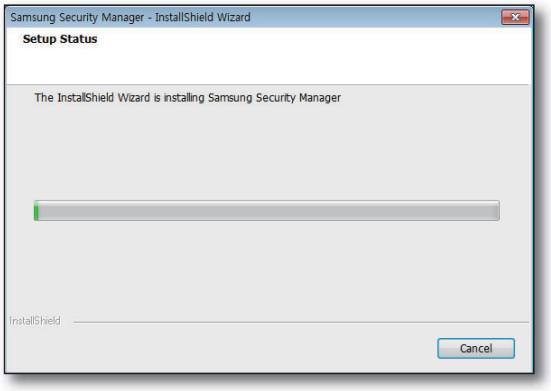
6. To proceed to the next step, click [**Next >**] button.



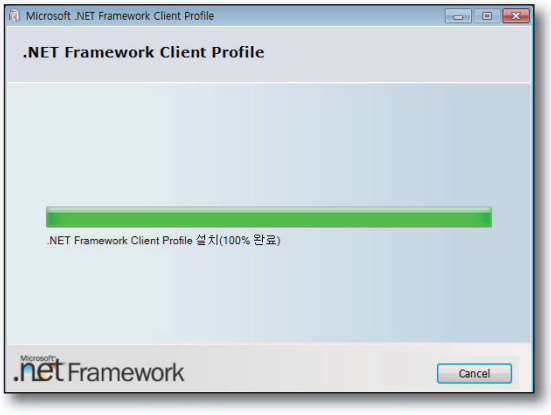
7. Click [**Install**] button to begin installation.


Samsung Security Manager - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

8. Samsung Security Manager begins its installation.



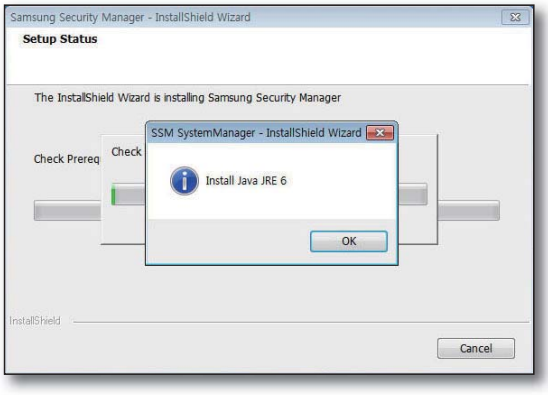
9. When prompted with .NET Framework license agreement, agree and proceed to the next step.



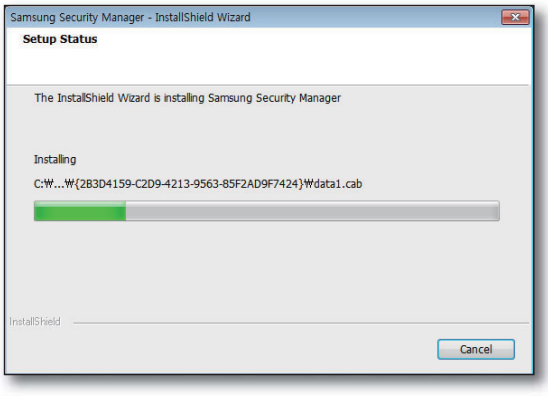
10. DirectX installation package, agree to the license agreement and click [**Next >**] when prompted with license agreement.

11. Upon completion of DirectX installation, click [**Finish**] to proceed.

12. Install the Java JRE.

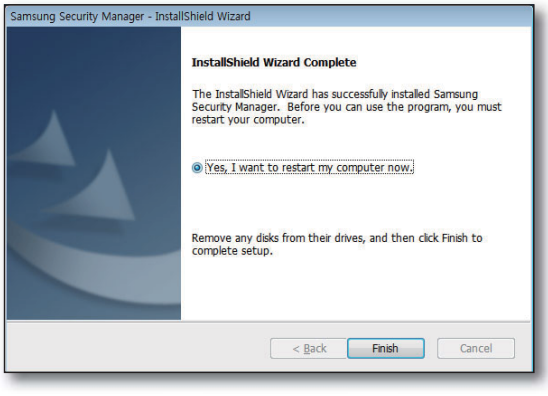


13. Please wait for installation wizard to finish JRE installation.



14. Upon completion, click [**Finish**] button.

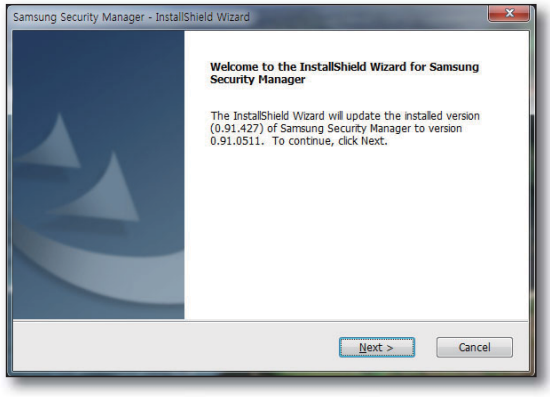
- If installed with required prerequisites, no further installation popup will appear.


Samsung Security Manager - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Samsung Security Manager. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

Updating

If Samsung Security Manager is already installed, you may update the application by running the update program to the latest version.

1. Run the update installer "**SSM_vx.xx_xxxxxx.exe**". The Update dialog should appear.
2. Click [**Next >**] button to proceed.

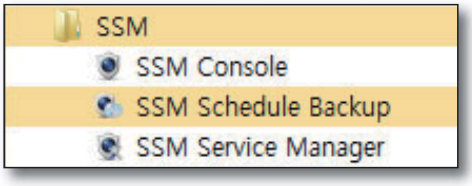

Samsung Security Manager - InstallShield Wizard
Welcome to the InstallShield Wizard for Samsung Security Manager
The InstallShield Wizard will update the installed version (0.91.427) of Samsung Security Manager to version 0.91.0511. To continue, click Next.
Next >
Cancel

- After updating the software application, restart the PC.

CHECKING INSTALLED INSTALLATION

Check whether the Samsung Security Manager installation has been successfully installed.

1. Click <**Start**> Windows menu.
2. If Samsung Security Manager has been successfully installed, SSM submenu should show 3 items of <**SSM Console**>, <**SSM Schedule Backup**> and <**SSM Service Manager**>.



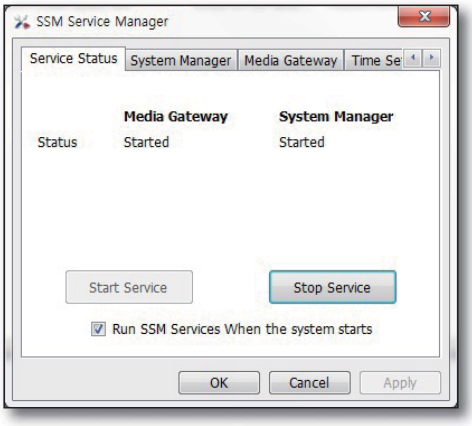
> ▪ For distributed installation, only those menu items selected in installation will appear. Refer to the "**Installation**" section. (Page 8)

GETTING STARTED WITH SAMSUNG SECURITY MANAGER

In case of Standalone installation

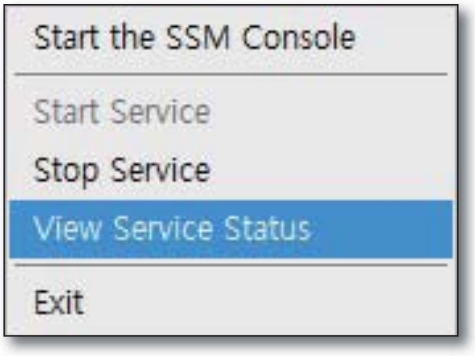
1. Click <**SSM Service Manager**> shortcut icon or expand and click "**Start > Samsung > SSM > SSM Service Manager**".
   - SSM Service Manager : A software program that manages server software products. To use SSM Console, the server should be ready.

2. Double click <**SSM Service Manager**> icon on the task tray or click right mouse button on it to open context menu and click <**View Service Status**>.
3. Click <**Start Service**> button.
   If successfully installed, each installed program component should show its <**Status**> as <**Started**>.
4. Double click <**SSM Console**> icon on the desktop or click right mouse button on the task tray icon of SSM Service Manager to open the context menu and select <**Start the SSM Console**>.
   The SSM Console program runs.



In case of multi installation

A Media Gateway server computer can connect to only 1 System Manager. A System Manager accepts connections from multiple Media Gateway servers. A System Manager accepts connections from multiple Console clients.



1. Run the Service Manager on the computer installed with the System Manager. (Page 84)
2. Click <**Start Service**> button.
   - If successfully installed, the System Manager should show its <**Status**> as <**Started**>.
3. Run the Service Manager on the computer installed with the Media Gateway. (Page 84)
4. On the Media Gateway server, set the IP address and port number of the computer installed with the System Manager. (Page 85)
5. Run the Service Manager on the computer installed with the Media Gateway and click <**Start Service**> button.
   - If successfully installed, the Media Gateway should show its <**Status**> as <**Started**>.
6. Double click <**SSM Console**> on the desktop of client computer that is installed with the Console, or click <**Start**> ➞ <**SSM Console**> icon.
   The SSM Console program runs.

LOG IN / OUT

Logging In

Once the program is started, a user must log in for correct use of the SSM Console.

1. Click SSM Console icon.
   The Login dialog should appear.
2. <**LIVE**>, <**EVENT**> and <**SEARCH**> viewer types are shown when viewer selection tab is clicked. Select one and log in to start the selected viewer.
3. Enter the user ID and password.
   - Default ID : admin
   - Default Password : 4321

- The default ID and password can be exposed to a hacking threat, so it is recommended to change the ID and password after installing the product.
  Please note that any security matters caused by using default information is user's responsibility.

- In case of distributed installation, you need to provide the System Manager server computer's IP address and port number by pressing the [**Settings (**)] button below the login button of login dialog.
- Select <**Save Login ID**> to avoid account input from the next login.
- Set <**Auto Login**> in Settings to log in automatically upon starting the program.
- In the cases below, login will fail and the user will be prompted with login information.

< If entered unregistered user ID >

< If entered password does not match >

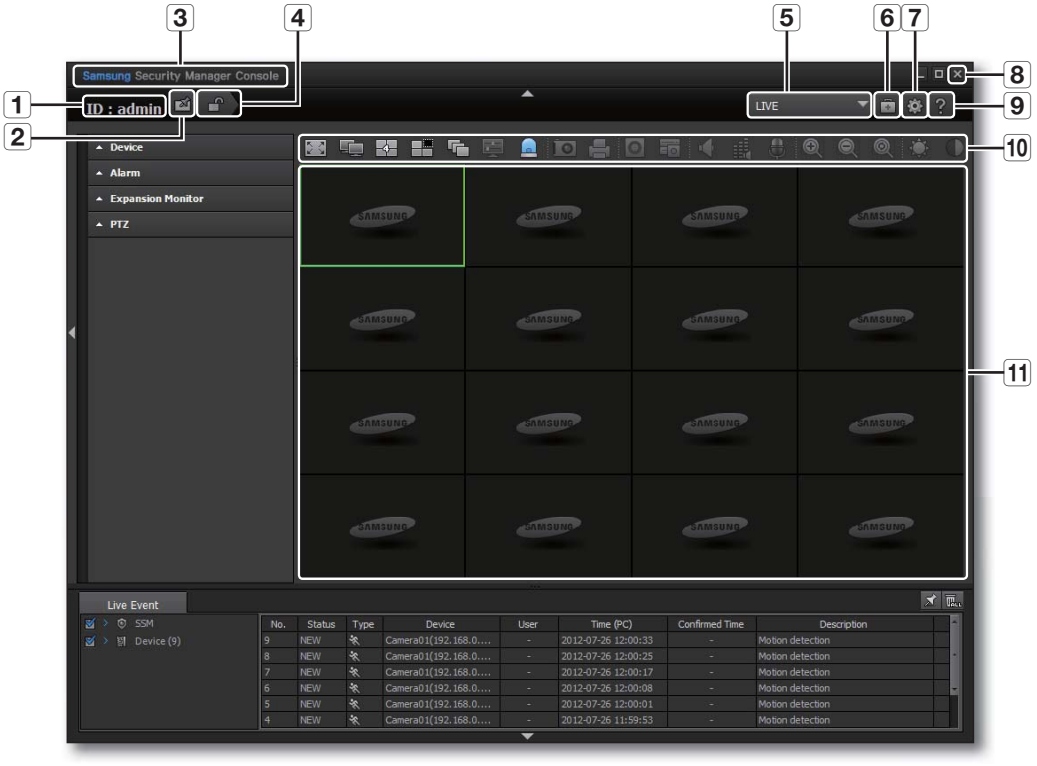
Logging Out

For safer use of SSM Console, please log out when the work period is finished.

Logging out saves the last screen composition and then closes all windows, and returns to the login prompt.

1. On the main window, click [**Logout (**)] button.
   The Logout dialog should appear.
2. On the dialog, click [**Yes**] button.
   It logs out.
   Terminating SSM Console automatically logs out the user.

SSM CONSOLE SCREEN COMPOSITION



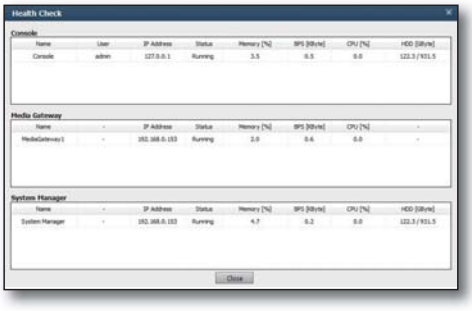
Item		Description
1	ID	Shows the User ID currently logged in.
2	UI LOCK	Locks the user interface. When attempted to use the program while locked, password dialog appears to unlock.
3	S/W Title	Shows the software title.
4	Logout	Logs out and exits.
5	Selecting the Viewer	You may select and run a desired viewer from <**LIVE**>, <**EVENT**> and <**SEARCH**>, or you can add a shortcut link to external program. Added external shortcut is shown in a list.
6	Check the System Status	You may check the system status of computers installed with each program component.
7	Settings	Opens the system settings menu screen.
8	Close	Exits the program.

Item		Description
9	Help	Shows the SSM Console application's information.
10	Menu Bar	Loaded with executable menu buttons.
11	Display Pane	Shows the screen according to the selected viewer.

Check the System Status

You may check the status of the computers installed with each program component.

1. Click [**Check the System Status (** **)**] on the top side of SSM Console.
2. Check each component's IP address and its status from the popped Health Check window.



Help

Click Help button to display program version and date information window.

Registering Media Gateway and Devices

1. Run Settings. (Page 62)
2. Add <**Media Gateway**>. (Page 65)
3. Select a Media Gateway and add devices. (Page 67)

Checking up Console Configurations

The Console consists of Live, Search, Event and Schedule Backup.
Understand the role of each component and run the appropriate one as required.

Console Structure

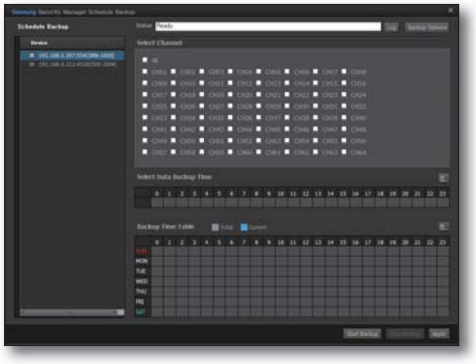
- Live Viewer : Provides real-time video and event information for monitoring, as well as PTZ control interface.
- Event Viewer : Provides viewing of real-time events and the searching / playing of device's events.

< Live Viewer >

< Event Viewer >

- Search Viewer : You can search and play video footage stored in your local computer or in the device.
- Schedule Backup : You can schedule to backup recorded data from a device.

< Search Viewer >

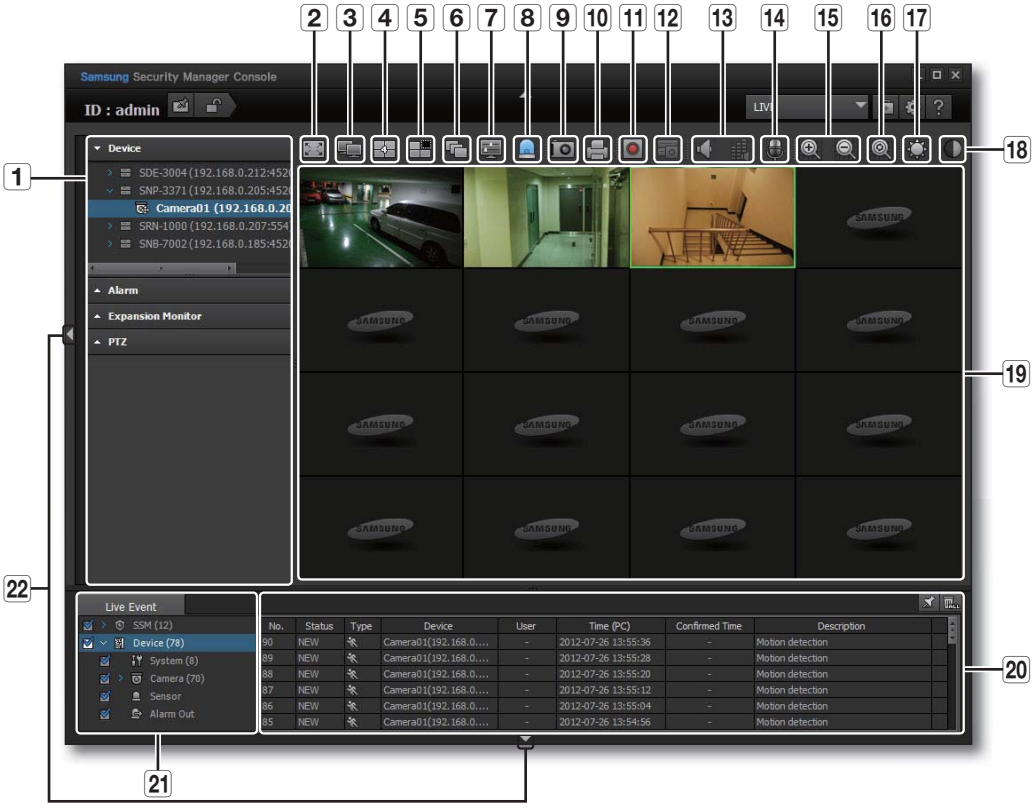


< Schedule Backup >

live viewer

Provides real-time video and event information for monitoring, as well as PTZ control interface.
Select [**LIVE**] menu of the viewer selection tab on the top right side of SSM Console.
Initially, SSM Console's default viewer is set to the Live Viewer.

NAMES AND FUNCTIONS OF LIVE VIEWER



Item		Description
1	**List Menu**	Shows registered devices and their connection status.
2	**Full Screen**	Fills the monitor's full area with video screen.
3	**Multi Monitor**	Enables expanded monitor configuration for monitoring.
4	**Change Tile Pattern**	Selects the split screen mode of the live viewer's video area.
5	**Deletes the video tile.**	Deletes all open video tiles.
6	**Sequence**	Screen switches its display layout mode automatically in order and interval defined in "**Settings > Screen > Monitor > Sequence**".

live viewer

Item		Description
7	OSD On/Off	Show or hide displayed indicators.
8	Initialize Events	Clears out all event indicators from all video tiles.
9	Capture	Captures the selected video tile's current screen as an image file.
10	Print	Prints out the selected video tile's current screen.
11	Record	Starts or stops recording of the selected video tile.
12	Device REC	Starts or stops recording with connected device remotely.
13	Speaker	Turns on or off the speaker.
	Volume	Adjusts audio volume.
14	Talk	If supported by the connected device, activates microphone to talk.
15	Zoom In/Out	Enlarges or reduces video size using digital zoom.
16	Original Size	Resizes zoomed screen to its original 100% size.
17	Brightness	Adjusts the current video tile's brightness.
18	Contrast	Adjusts the current video tile's contrast.
19	Display Pane	Shows the Live Viewer screen.
20	Event List	Shows events occurred on connected devices.
21	Event Filter	You can select event types to be displayed on the event list.
22	Show/Hide Tools	Use these buttons to show or hide menu pane and control buttons.

Camera status indicator

Indicators shown on the video tile tells the connected camera's input status.

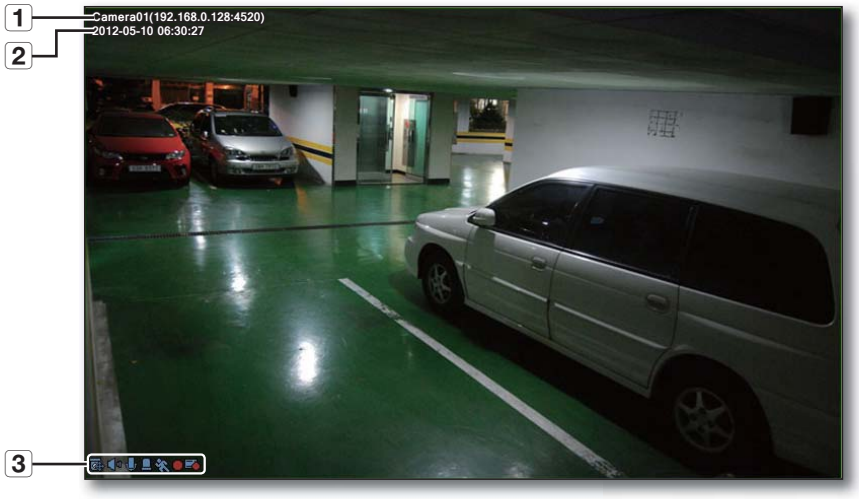
< Video Loss >

< Disconnected >

< Exceeded max user >

< Camera Off or Covert >

NAMES AND FEATURES OF SCREEN INDICATORS



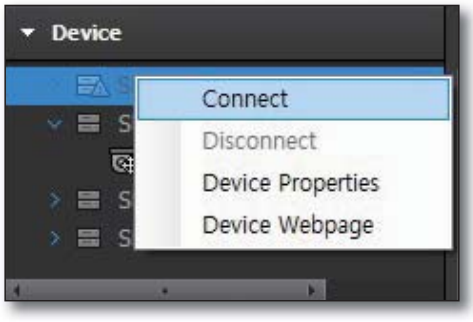
Item			Description
1	Camera Name		Shows the name and IP address of camera connected to the corresponding video tile. If <**Use Device's Default Name**> is set, the name registered to the device is shown as the camera name.
2	Date & Time		Shows the video's date and time information.
3	Icon		Shows the device supports PTZ control.
			Display the status of audio output.
			Display the status of using the microphone.
			Appears when an alarm is generated.
			Appears if motion event is detected by the corresponding camera.
			Appears if a video analysis event has occurred on the corresponding camera.
			Appears if audio event is detected by the corresponding camera.
			Shows that recording is in progress on the computer running SSM Console.
			Shows that recording is in progress on a remotely connected device.

DEVICE

Add a networked device and allocate a registered camera to the user's device list. Select the device to view the in a tile.
In registration step, set to <**Connect**> to display the device in the list as connected.

Connecting Devices

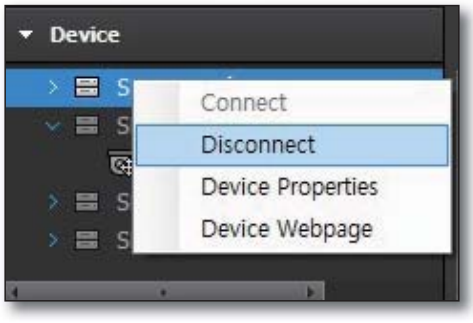
1. Select a device to be connected to.
2. Right mouse click on it.
   Upon the context menu, select <**Connect**>.



- For further information on adding devices, refer to "**Settings > Device**". (Page 65)
- If logged out while connected to a device, logging in again revives previously connected devices and groups automatically.
- If you select a list and enter text (keyword), only those groups and devices that contain the text will be displayed in the search result. This is useful if you do the search for a long list of devices or groups.

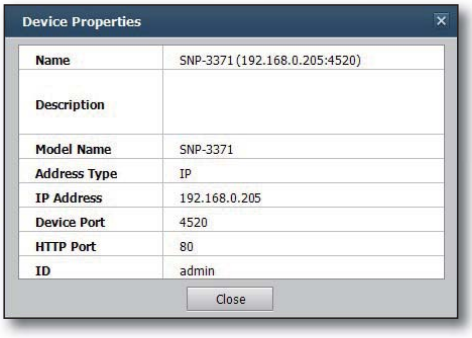
Disconnecting Devices

1. Select a device to be disconnected.
2. Right mouse click on it.
   Upon the context menu, select <**Disconnect**>.



Device Properties

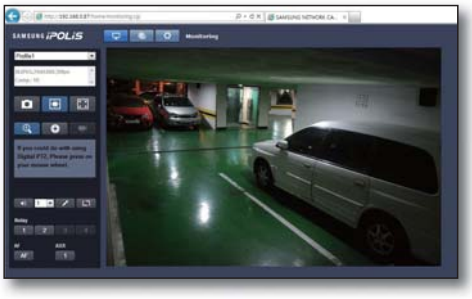
1. Select a device.
2. Right mouse click on it.
   Upon the context menu, select <**Device Properties**>.
3. Check the device information.



Device Webpage

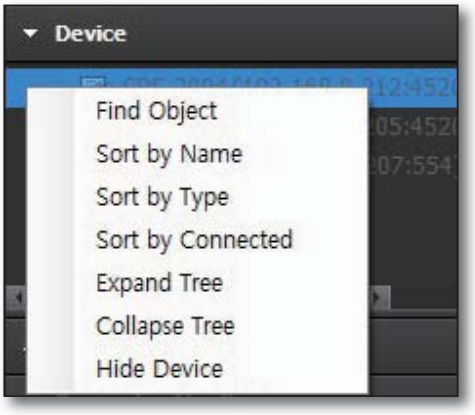
Runs the device on a web viewer.

1. Select a device.
2. Right mouse click on it.
   Upon the context menu, select <**Device Webpage**>.
3. Enter the access information to the device, ID and password.
4. Moves to the connected device's web viewer starter page.



Device Context Menu

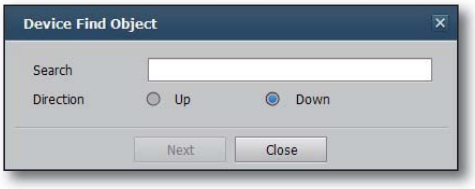
Right mouse click on an empty area within the device list to open device context menu.



Finding Objects

You may find a device by name from the registered devices.

1. From the context menu, select <**Find Object**>.
2. Once the Find Object window appears, select the searching direction.
3. Enter the keyword for name and click [**Next**] button.



- [**Ctrl**]+[**F**] also brings the find object window.
- Find object opens only when the object tree has the focus (highlighted).
- The [**Next**] button is activated only if a keyword exists.

Sort by Name

From the context menu, select <**Sort by Name**> to sort devices by name.

Sort by Type

From the context menu, select <**Sort by Type**> to sort devices by type, while the device tree collapses.

Sort by Connected

From the context menu, select <**Sort by Connected**> to sort devices by the order of connection establishment.

Expand/Collapse Tree

From the context menu, select <**Expand Tree**> or <**Collapse Tree**> to show or hide tree list of registered devices.

Show / Hide Devices

From the context menu, select <**Hide Device**> to hide registered devices.
If hidden, the menu switches to <**Show Device**> automatically, and selecting it reveals the hidden devices.

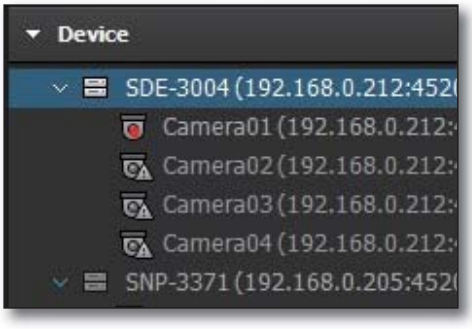
CAMERA LIST

If connecting to the device was successful, a list of connected cameras appears.

Camera Indicators

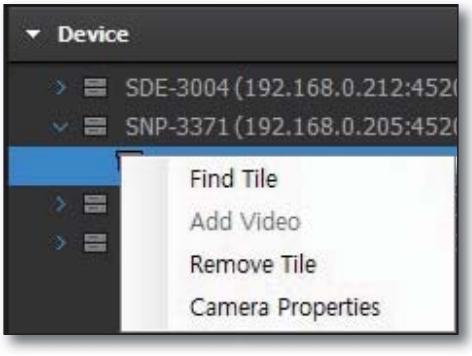
Indicators that appear by each camera in the list show the camera's status information.

- : General camera
- : Camera supports PTZ control
- : In recording
- : Camera disconnected by a user
- : Camera is disconnected / unreachable



Camera Context Menu

From the device list, select a camera and right click on it to open the camera context menu.



Find Tile

Highlights the selected camera's video tile.

Add Video

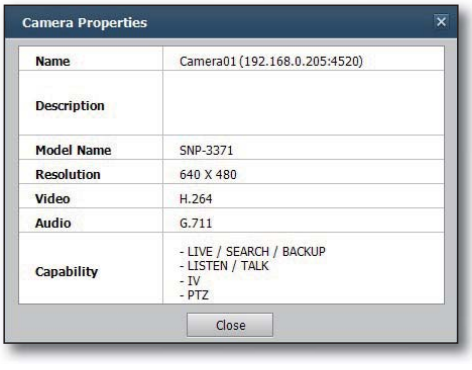
Selected camera's video is displayed on an unoccupied tile.

Remove Tile

Select a camera and open context menu to select <**Remove Tile**> to remove the corresponding tile.

Camera Properties

Select a camera and open context menu to select <**Camera Properties**> to display the camera's properties.

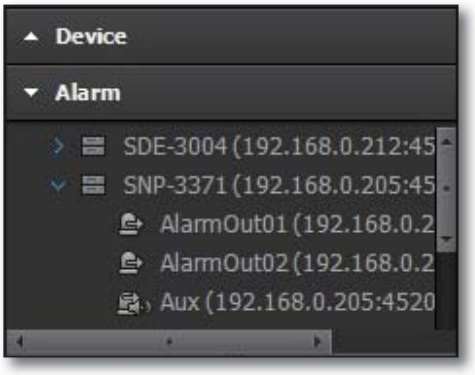


ALARM OUT AND CONTROL

Once a device's connection is established successfully, the device appears in the Alarm Out list.
You may turn on or off each device's alarm.

Alarm Out Context Menu

Select an alarm and right click on it to open its context menu that enables alarm control.

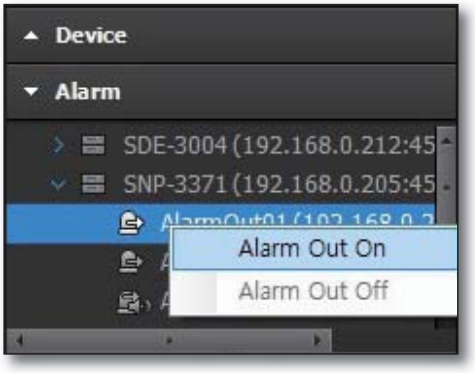


Turning On Alarm Out

Select an alarm and open context menu to select <**Alarm Out On**> to turn on the selected alarm's alarm output.

Turning Off Alarm Out

Select an alarm and open context menu to select <**Alarm Out Off**> to turn off the selected alarm's alarm output.



Turning On / Off Alarm Beep

For devices supporting Alarm beep speaker, <**Alarm Beep On**> or <**Alarm Beep Off**> menu appears.

Upon such device's alarms, you can turn on or off beep sound output.

SELECTING TILE PATTERN

You can set the video pane's split-screen mode.

- 4:3 screen modes : 1/4/6/8/9/10/13/16/17/21/25/36/49/64

- 16:9 screen modes : 6/12/20/30

- While in multi-monitor environment, layouts and split modes for less than 100 channels will be available.
  Other modes will be disabled.
- Modes having more splits than the number defined in <**Split Screen**> will be disabled. (Page 75)

MONITOR EXPANSION

You can configure SSM software to display in multiple monitoring devices with defined layout.
From the top side menu, select [**Multi Monitor (** **)**] button then select a desired multi monitor type, and configure the layout as preferred on the expanded monitor.

Applying Layout to the Monitor Expansion

Selecting the Monitor Expansion

1. From the top side menu, click [**Multi Monitor (** **)**] button.
2. Select the number of monitors.
   As many monitors as specified are displayed on the screen.
3. Select a monitor to be applied with the layout settings by clicking arrows beside the monitor name.

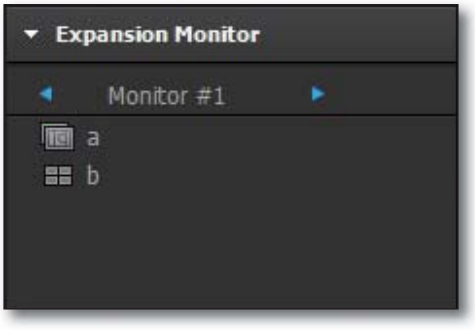
- Monitor #1 is the default monitor, and Monitor #2 and others are expanded monitors.
- You can set expanded monitor in "**Screen > Monitor**". (Page 75)

Setting the Tile Pattern for the expansion monitor

1. Click a tile of an expansion monitor to activate the corresponding monitor.
2. From the top side menu, click [**Change Tile Pattern (** **)**] button.
3. Select a desired tile pattern to apply it.

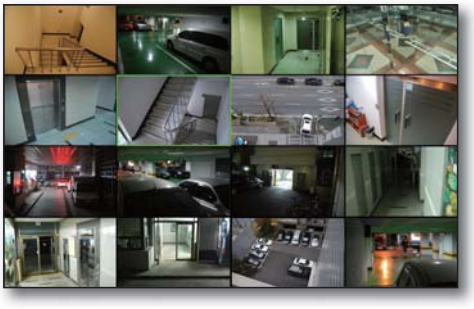
Applying Layout

Select a monitor and then double click the desired layout.
The selected monitor is applied with the layout.



To add a layout

You can add multiple layouts to a desired monitor.
You can add layouts in "**Screen > Layout**" of the Settings menu.
For further information on adding layouts, refer to "**Setting Layouts**". (Page 72)



< Camera Layout >

< Map Layout >

Using Map Layout

Selecting Split View Mode for Map Layout

When selecting a Map Layout, up to 10 split view modes are available for the corresponding.

Utilizing the Map Layout

In the split view mode, a desired layout can be applied quickly.

- The Free mode places the video right upon the camera icon when the icon on the map layout is clicked.
- The other 9 modes place the camera's video on the first unoccupied tile when clicked the camera icon.
- To delete the selected video, press the [**Delete**] key on the keyboard.
- To exit Map Layout mode, click [Mode] button.

2D / 3D View

You can change the 2D or 3D viewing of the map layout screen.
Place mouse cursor on the top right side of the map layout to display control window that provides screen mode changing and viewing angle adjustment.

< Initial Screen >

< When mouse cursor hovers >

To change the mode

Click [**Mode Change (** **)**] button to switch between 2D and 3D modes.

Switching to 3D mode gives perspective to the screen and arrows appear on left/right side of [**Mode Change (** **)**] button.

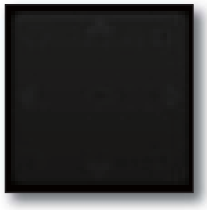
Clicking direction arrows beside the [**Mode Change (** **)**] button will rotate the screen in the direction by 45 degrees.

< 2D Mode >

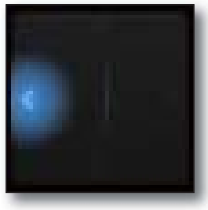
< 3D Mode >

To move around the map

- Click the bright circle around the [**Rotate (** **)**] button to move the map in the direction.
- Click palm icon to relocate the map layout to the default.
- Right click and drag the map to move around as desired.



< Initial >



< When pressed >

To zoom in/out

Use zoom control bar to zoom in/out the current map screen. To zoom in/out, click the control bar in the middle and drag. Mouse wheel button zooms in/out the map too.

Instant Viewer

The camera icon on the map layout blinks if an event occurs. Double click the camera icon to display "**Instant Viewer**".

It enables checking the event and digital zooming on the video screen.

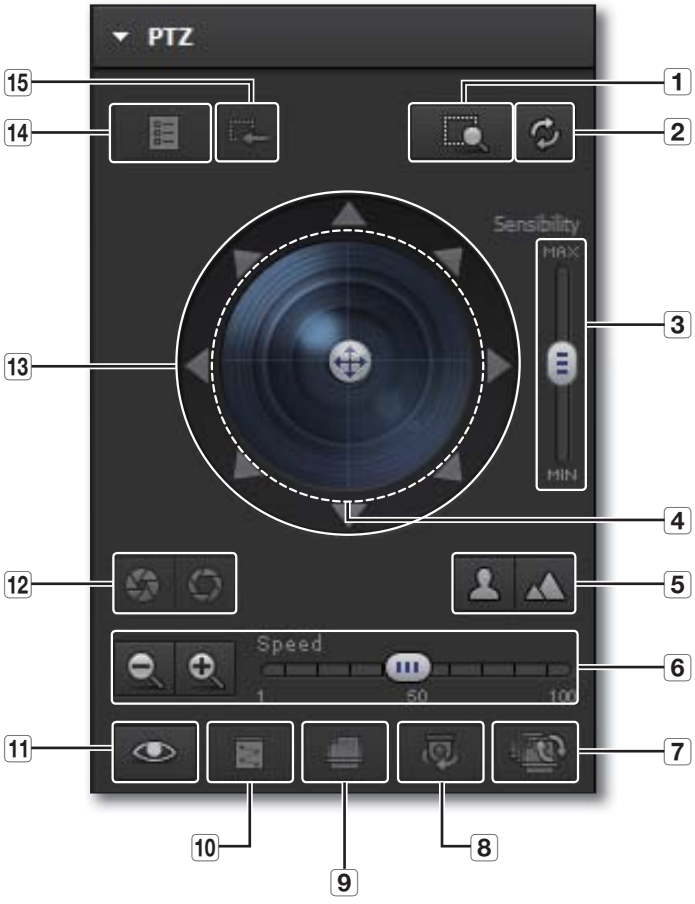
■ For further information on using the Instant Viewer, refer to "**Instant Viewer**". (Page 35)

PTZ CONTROL

If the connected device supports PTZ functions, you can control PTZ camera remotely.

- Depending on camera model used, PTZ control may not be supported. For further information, refer to the camera's user manual.

Names and Functions of PTZ Control Window



Item		Description
1	Area Zoom	Controls PTZ to fill in tile with the dragged area on the video.
2	Go to 1x Zoom	Restores the original 1x zoom from Area Zoom screen.
3	PTZ Sensitivity Controler	Adjusts the PTZ ball control sensitivity to faster or slower.
4	PTZ Ball	While operating PTZ, click and hold the ball and drag to desired direction to adjust the camera's framing.

Item		Description
5	Focus Adjustment	Adjusts the camera's focus manually. ▪ Focus Near : Adjusts the focus range to closer distance. ▪ Focus Far : Adjusts the focus range to farther distance.
6	Zoom Adjustment	Zooms in / out with controllable zooming speed. Zooming activates only if clicked at the speed set by speed slider. ▪ Zoom Speed Slider : Sets the zooming speed out of 1 – 100 range. ▪ Zoom In : Zooms in to enlarge the image. ▪ Zoom Out : Zooms out to reduce the image.
7	Patrol	This is to call a group and its presets in order for monitoring. You can only activate or deactivate the <**Tour**> option of the camera.
8	Swing/Autopan	Sets the camera to repeat swinging from a certain position to another. According to the configuration, you can set to rotate or swing. You can only activate or deactivate <**Autopan**> option of the camera.
9	Group/Scan	Controls the camera according to the added preset groups in order, where a preset group can be of multiple presets. You can only activate or deactivate <**Scan**> option of the camera.
10	Trace/Pattern	Moves and zooms the camera with a predefined settings automatically. You can only activate or deactivate <**Pattern**> option of the camera.
11	Preset	You can save specific camera's view as a preset, or recall a preset to set camera framing.
12	Iris Control	Controls the amount of light travels through the lens. ▪ Close Iris : Sets to bigger F number for less light exposure, resulting in darker image. ▪ Open Iris : Sets to smaller F number for more light exposure, resulting in brighter image.
13	Camera Menu Traversal / PTZ Control	While opening the camera menu, adjust the selected position. / Controls PTZ operation.
14	Switch to the Menu Mode	Moves to the connected camera's settings menu screen.
15	Exit the Menu Mode	Exits the menu setup.

Using the Camera Menu

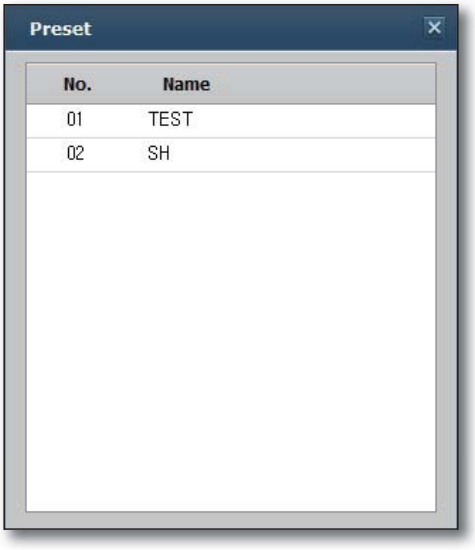
Click Camera Menu button to toggle display of the connected camera's menu on the screen.

1. Using the PTZ Ball up/down/left/right control button, move to a desired menu.
2. To select the menu, click PTZ ball control.
3. To exit camera menu mode, click [**Exit the Menu Mode (** **)**] button.

Preset Control

Click [**Preset (** **)**] button to display saved list of presets.

Select one from the list to set the camera's view to the saved location.



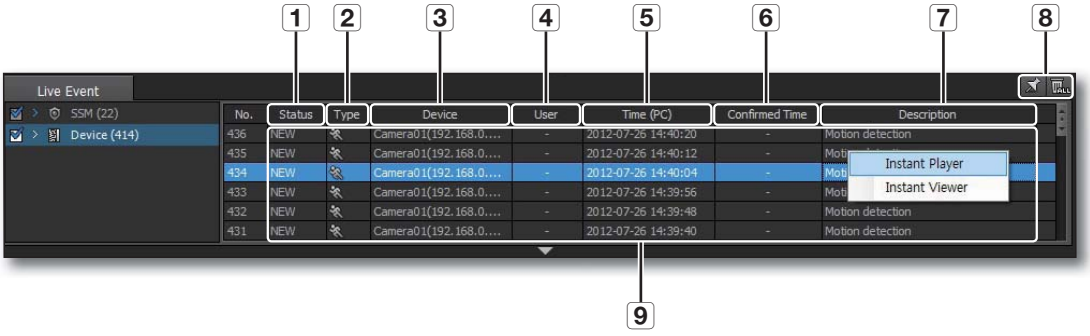
- Up to 127 presets can e saved in Settings menu.
  For further information on preset, refer to "**Setting Presets**". (Page 77)

EVENT LIST

Lists up device events in real-time.

Viewing Real-time Events

You can check device events from all connected devices in the list.
Filter the events by selecting type of events for the Event List.

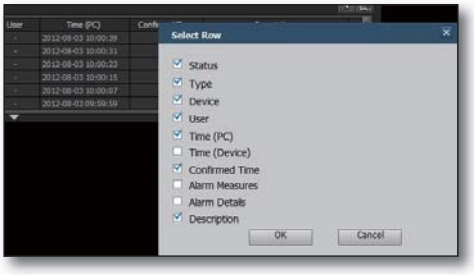


Item		Description
1	**Status**	Shows the event status.
2	**Type**	Shows occurred event's type as icon.
3	**Device**	Shows the device type.
4	**User**	In SSM system, it shows the current SSM user's account information. For general device-related events (motion detection, sensor, etc.), the user ID who acknowledged the event is shown.
5	**Time (PC)**	Shows the event time.
6	**Confirmed Time**	Shows the time acknowledged.
7	**Description**	Describes the meaning of the event.
8	**Scroll Lock**	Locks the list not to automatically scroll.
	Clear List	Fully clears out the event list.
9	**Event List**	Shows real-time events of the device selected in the left pane. Double click a listed item to open "**Instant Viewer**" pop-up window. Right mouse clicking on an item opens context menu of "**Instant Viewer**" and "**Instant Player**".

Selecting displayed items

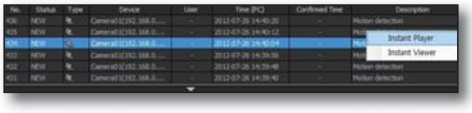
You can select items to be displayed in the event list.

1. Select the title on top of the event list, and right click on it.
2. Select event items to be displayed in the list, by checking the checkbox.
   Items such as event time (device), measures taken and alert history can be listed additionally.



PLAYING RECORDED EVENTS

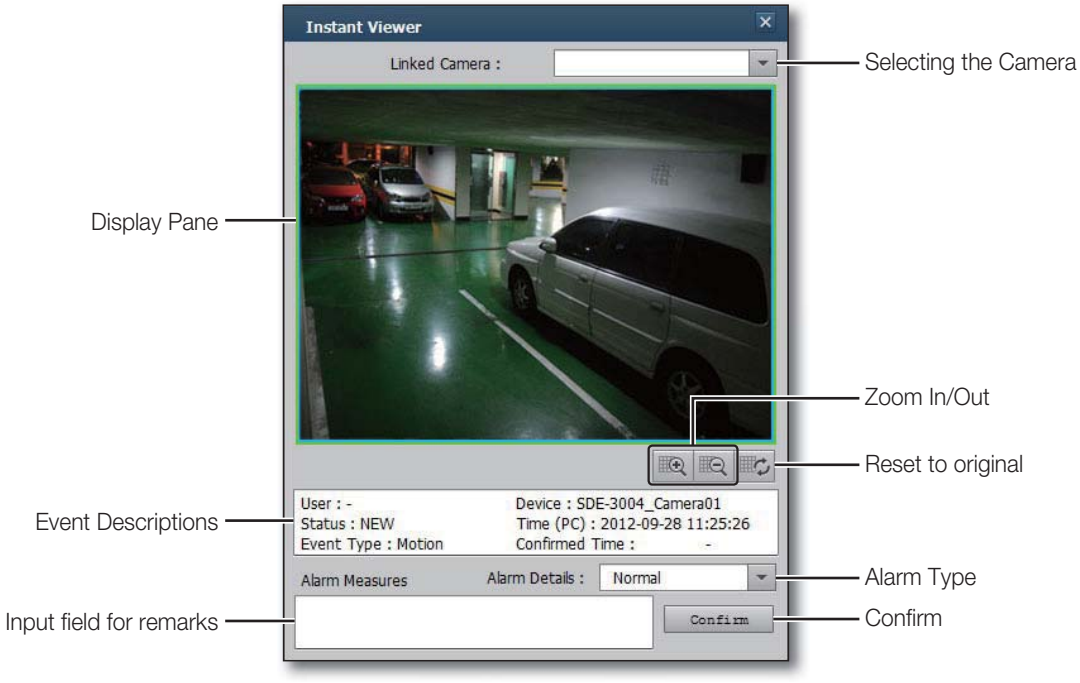
Select an event item from the list and right click on it to open context menu of <**Instant Viewer**> and <**Instant Player**>. Select either one of them to check the video.



▪ The <**Instant Player**> is playable only if the corresponding device contains saved data.

Instant Viewer

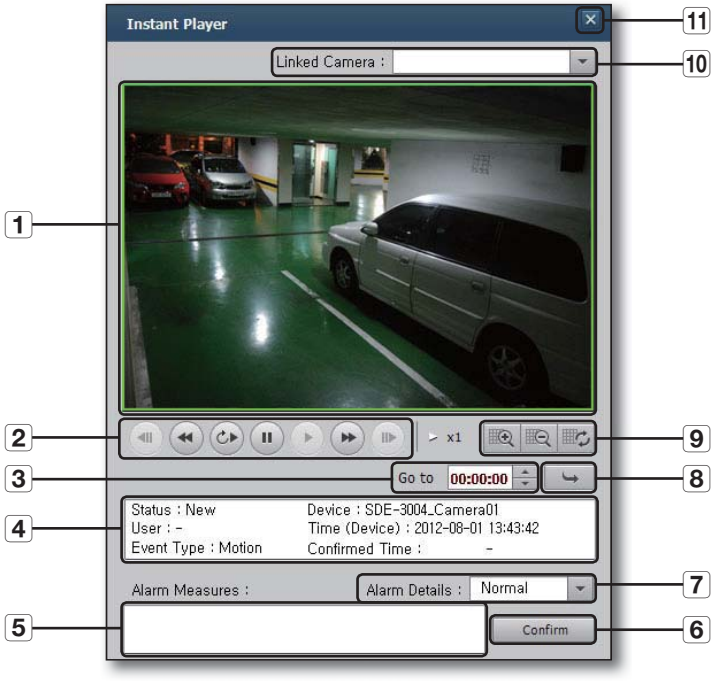
Double click a listed item to open "**Instant Viewer**" pop-up window.
You can confirm the event, record event remarks and end the event status.



Instant Player

Select an event item from the list and right click on it to open context menu and click <**Instant Player**> to open it and play the corresponding camera's video image.

Names and Functions of the Instant Player

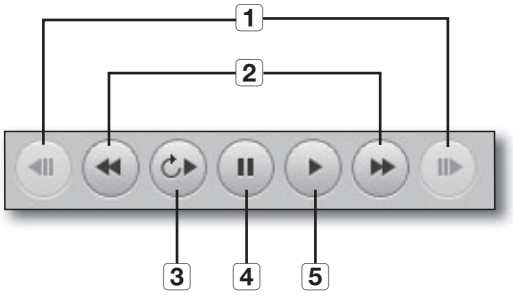


Item		Description
1	**Display Pane**	Shows the video.
2	**Video control buttons**	Controls the current event playback.
3	**Time Selection**	Plays video of the selected time.
4	**Event Information**	Shows the event information.
5	**Input field for remarks**	Enter the measures taken or remarks regarding the occurred event.
6	**Confirm**	Confirms and acknowledges the event.
7	**Alarm Details**	You can selectively record alarm event's type when confirming the event.
8	**Playback by time**	Moves to the selected time.

Item		Description
9	**Video Control**	Controls digital zooming of the player screen.
10	**Linked Camera**	You can select one from list of cameras linked to the alarm.
11	**Exit**	Closes and exits the Instant Player. If [**Confirm**] button is not clicked, exiting the player does not confirm the event.

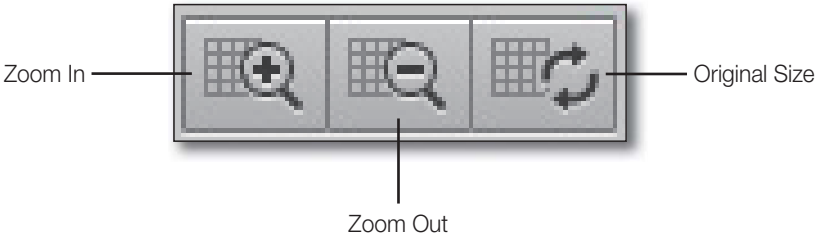
- Recorded video footage can be played with Event Viewer, Search Viewer and Instant Player. Note that one saved footage cannot be played with multiple viewers at the same time.

Names and Functions of Video Control Buttons



1	Step by frames
2	Forward/backward fast play
3	Play from event time (reset to event time)
4	Pause
5	Play

Video Control / Zoom In / Zoom Out Buttons



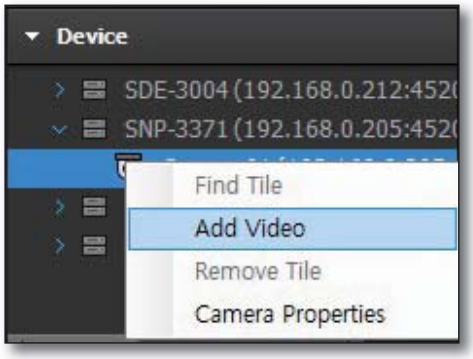
LIVE VIDEO SCREEN

Live feed from the connected device is displayed in the selected tile.

Monitoring by Selecting Cameras

To display video feed from a camera on an unoccupied tile:

- Double click a camera from the device tree to display its video feed on the first unoccupied tile.
- Select a tile, and open the context menu to select <**Add Video**>.



- In case of using multiple monitors, it is added to the monitor which is activated.
- When there's no empty tile, the video is displayed on the focused (selected) tile.

To display video feed from a camera on a specific tile:

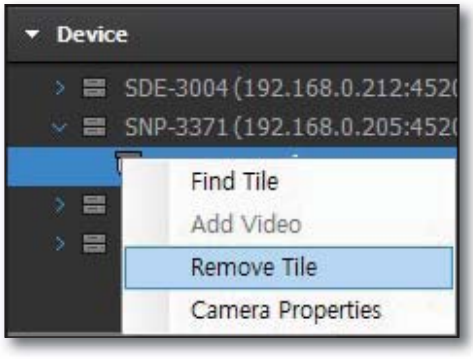
1. Select a camera from the device tree.
2. Drag it and drop on a desired tile.

To change the video tile:

1. Select a tile.
2. Drag it and drop on a desired tile.
   Selected two tile's video display swaps each other.

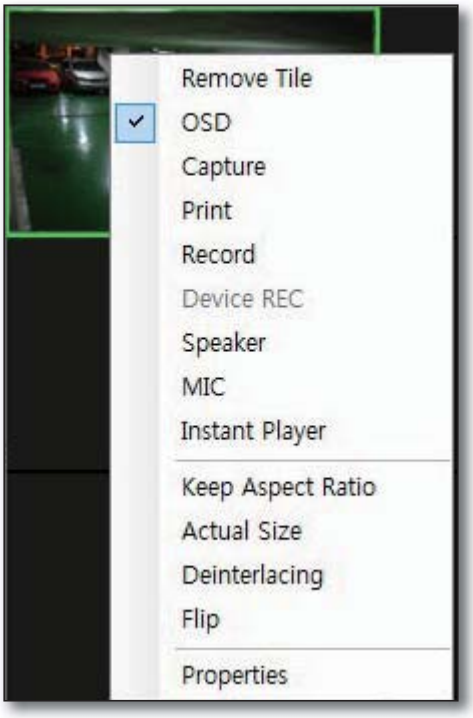
To remove video feed from a tile:

1. Select a tile or camera to delete and right click on it.
   - Or, press the [**Delete**] key of the keyboard to promptly delete.
2. From the context menu, select <**Remove Tile**>.
   The selected camera's video is removed from the tile and it becomes unoccupied.
3. To remove all video feeds from every tile, click [**Deletes the video tile. (** **)**] button on top of video pane.
   Entire tiles become unoccupied.



Using the Tile Context Menu

Select a video tile from the video pane and right click on it to open the context menu.
Click to select desired ones from the appeared list of available menu items.



Remove Tile

Removes the video from the selected tile.

OSD

Sets whether to display on-screen display menu and icons on the video screen, such as date, camera name and other information.

It acts the same to that of the [**OSD On/Off (** **)**] button on top side of video pane.

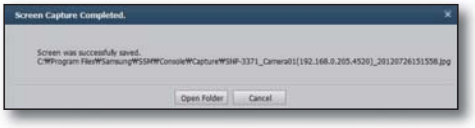
- To configure OSD information items, check desired items to be displayed in <**OSD Display**> of "**Console > Environment**". (Page 81)

Capture

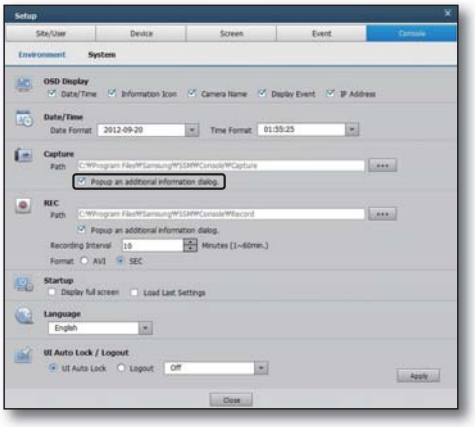
Captures and saves the currently selected tile's video image in the specified destination file path.
It acts the same to that of the [**Capture (**)] button on top side of video pane.

To save the captured screen:

1. Select a tile to be captured.
   "**Capture**" window appears.
   - Depending on system configuration, saves immediately without displaying the screen capture setup step.
2. In <**Display Information**>, check to select information items to be saved with the captured image.
   - Camera Name : If checked, saved capture contains the camera name at the top of the image.
   - Date/Time : If checked, saved capture contains the time captured at the top of the image.
   - Description : If checked, saved capture contains the description recorded in the Description text field.
     - Up to 50 characters can be entered.
   - Path : Sets the destination file path of the captured file.
3. When done with setup, click [**OK**] button.
   A popup saying save completed appears.
4. To check saved capture file, click [**Open Folder**] button.

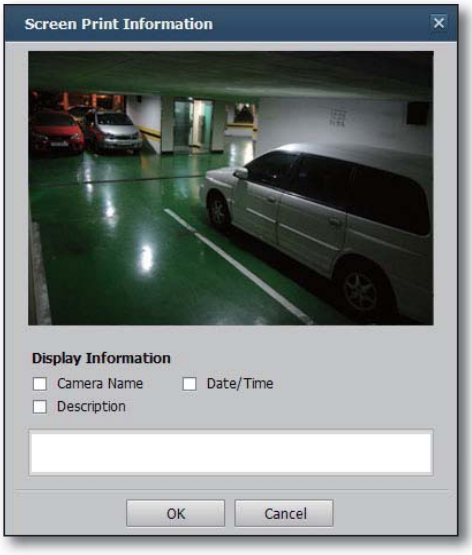


- If <**Popup an additional information dialog.**> option in "**Capture > Path**" is selected, every capturing prompts with file path and image information on the popup dialog.
- If not selected, capturing directly saves the captured image without prompting with additional information dialog and completion dialogs appears.



Print

Prints out the selected tile's current video image to the printer connected with your computer.
It acts the same to that of the [**Print (** **)**] button on top side of video pane.



To print the screen:

1. Select a tile to be printed.
   "**Screen Print Information**" window appears.
2. In <**Display Information**>, check to select information items to be printed with the screen image.
3. Click [**OK**].
   Print window of the printer connected to your computer appears.

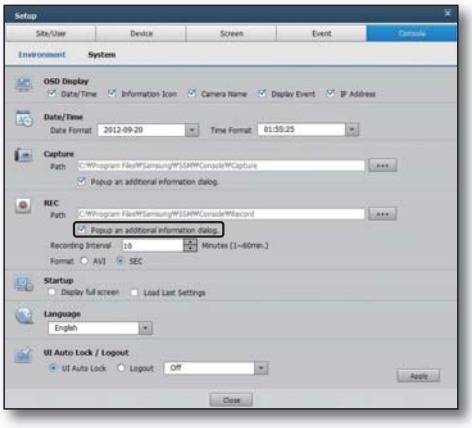
▪ For further details on <**Display Information**>, refer to "**Capture**". (Page 40)

Record

Starts and stops recording of the currently selected tile.
It acts the same as the [**Record (** **)**] button on top side of video pane.

To start recording:

1. Click <**Record**>.
   The "**Record**" window appears.
   - Depending on system configuration, records immediately without displaying the record setup step.
2. Set the file path and click [**OK**] button.
   The record indicator appears on the tile and starts recording.
3. To stop recording, click <**Record**> again.
   A "**Warning**" dialog appears.
4. Click [**OK**].
   Unchecking the checkbox in front of <**Record**> stops the recording.



▪ If <**Popup an additional information dialog.**> option in "**REC > Path**" is selected, every recording prompts with file path on the popup dialog.

Device REC

Starts or stops recording onto the device connected to the tile's camera.
It acts the same as the [**Device REC (** **)**] button on top side of video pane.

Speaker

Transmits or stops Transmiting sound from the selected camera.
It acts the same to that of the [**Speaker (** **)**] button on top side of video pane.

Microphone

Produces sound through the microphone at a remote device.
It acts the same to that of the [**Talk (** **)**] button on top side of video pane.

Instant Player

Displays the Instant Player window for the selected channel.

- Only playable if the device contains recorded footage data.
- For further use of the Instant Player, refer to "**Instant Player**". (Page 36)

Keep Aspect Ratio

Keeps original video's aspect ratio.
If not selected, the video is filled into the video pane.

< Variable Aspect Ratio >

< Keep Aspect Ratio >

Original Size

If selected, the video is reset to the original size.
If the video's size is bigger than the screen, you can move it with mouse dragging.

Deinterlacing

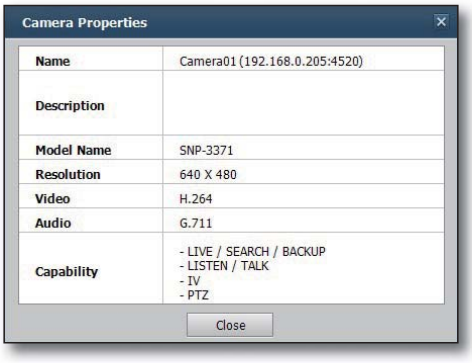
Sets or cancels deinterlacing of the tile's video.

Flip

Flips the video vertically.

Properties

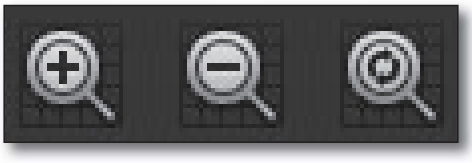
Shows the selected camera's property information in a pop-up window.



DIGITAL ZOOM

Digital zooming allows the enlarging of the video as if using a magnifier.
It works on the displayed image by enlarging it digitally, which is different than optical zooming of lens.
Digital zooming provides magnification up to 16 times of the original.

Setting Digital Zoom Area



1. From the top side menu, click [**Zoom In (** **)**] button.
   It switches to digital zooming mode, and every clicking magnifies the image by 50%.
2. Click a desired video and then drag it or click Zoom In button for further zooming.
   Enlarged image is centered by the point you clicked.
   When an area is selected by dragging, the selection fills the screen.

Digital Zooming Out

1. From the top side menu, click [**Zoom Out (**)] button.
2. Click a video.
   Reduced image is centered by the point you clicked.
   Every clicking of Zoom Out button reduces the image by 50%.

Exiting Digital Zoom

1. From the top side menu, click [**Original Size (**)] button.
2. Digital zooming ends, and the video is reset to the original.

Moving Video Area with Pan Cursor

1. While in digital zooming, click on the zoomed area marker shown near the bottom of digital zoom screen.
2. While holding mouse button, drag to move it to a desired area.

< In Digital Zooming >

< Released Digital Zooming >

- If clicked Zoom In/Out button, it resizes by 50%.
- Restoring to the Original Size exits digital zooming.

Switching to Full Screen Mode

1. From the top side menu, click [**Full Screen (**)] button.
   Only the video pane fills the screen.
2. To exit the full screen mode, press [**Esc**] on the keyboard.

Running Sequence

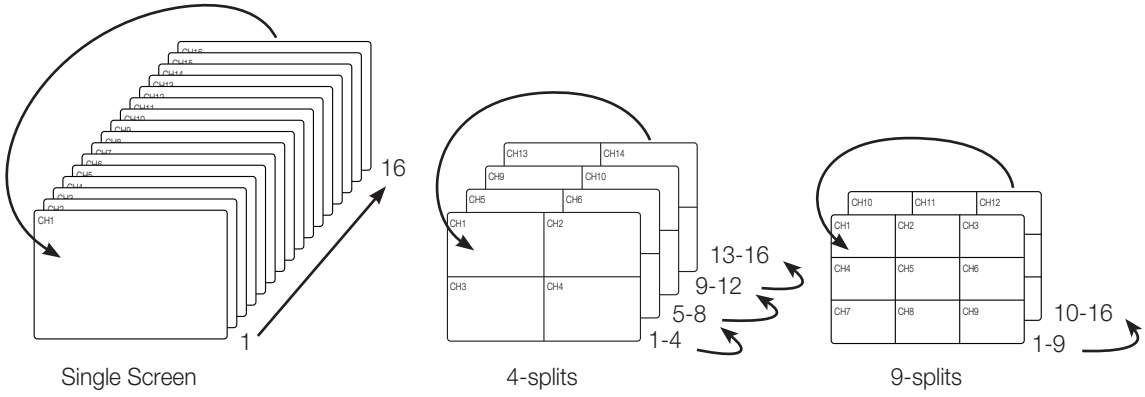
This function enables an automatic sequence display of channels in a pre set time.

Used when there are more connected channels than the current screen splits. It switches to the next set of channels according to the current screen split mode.

1. From the top side menu, click [**Sequence (** **)**] button.
   Runs sequenced display in the current split screen mode.
2. To exit sequence mode, click [**Sequence (** **)**] button again.

- While in sequence mode, Map Layout becomes unavailable.
- The Sequence mode supports split screen mode up to 16-splits. If you configure Sequence mode to include a layout having more than 16 splits, actual Sequence mode operation limits playback to 16-split mode.
- You can define the order of layouts and their dwell time for sequence mode in "**Settings > Screen > Monitor**". (Page 75)

Ex) In case of using 2 DVRs where 16 cameras are connected to DVR 1 and 8 cameras are connected to DVR 2, and your screen is in 9-split mode, the sequence mode repeats:
Camera 1~9 of DVR 1 → Camera 10~16 of DVR 1 and Camera 1~2 of DVR 2 → Camera 3~8 of DVR 2

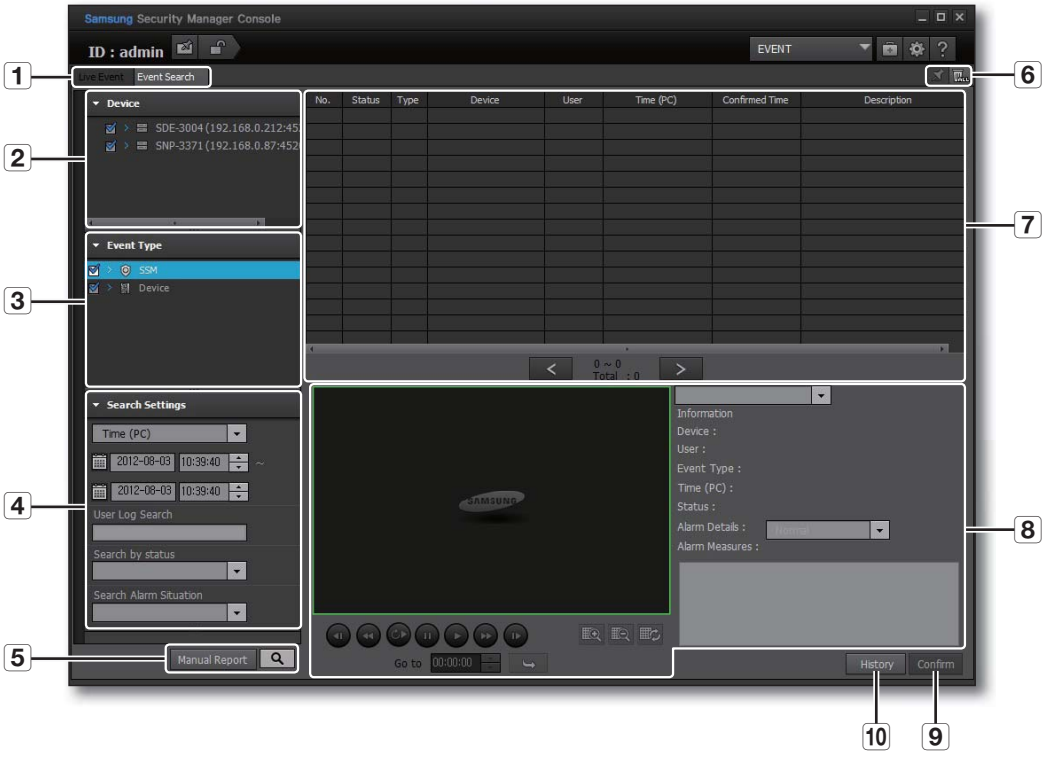


Single Screen 4-splits 9-splits

event viewer

It provides viewing of real-time events and searching / playing events of devices.
Select [**EVENT**] menu of the viewer selection tab on the top right side of SSM Console.
Or, select [**EVENT**] viewer on login screen of SSM Console.

NAMES AND FUNCTIONS OF EVENT VIEWER



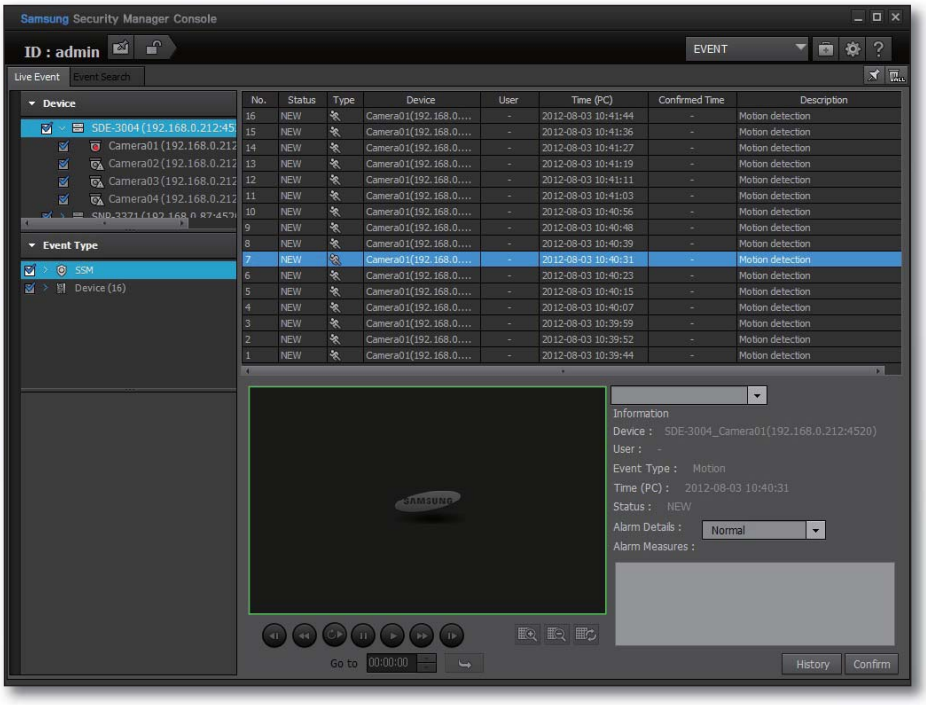
Item		Description
1	**Live Event / Event Search Tabs**	Select either one of real-time event and event search.
2	**Device List**	Select a device to display events of the selected device in the event list.
3	**Event Type**	Shows selected type of events only in the event list.
4	**Default Search Settings**	Defines search settings for the event search list.
5	**Manual Report**	Shows events corresponding to the search criteria.
6	**Scroll Lock, Clear List**	Locks the list not to scroll, and clears all events listed.

Item		Description
7	Event List	Shows events, click column header to sort events by the selected one.
8	Event Details	Shows detailed information of the selected event along with the event video.
9	Confirm	When clicked after confirming the event searched, acknowledges the event. All events other than log, SSM (User, System) and Device (System, Alarm Out) can be confirmed as cleared event.
10	History	Shows the event history of the selected.

EVENT SEARCH

Viewing Live Events

You can check real-time events in the event list.

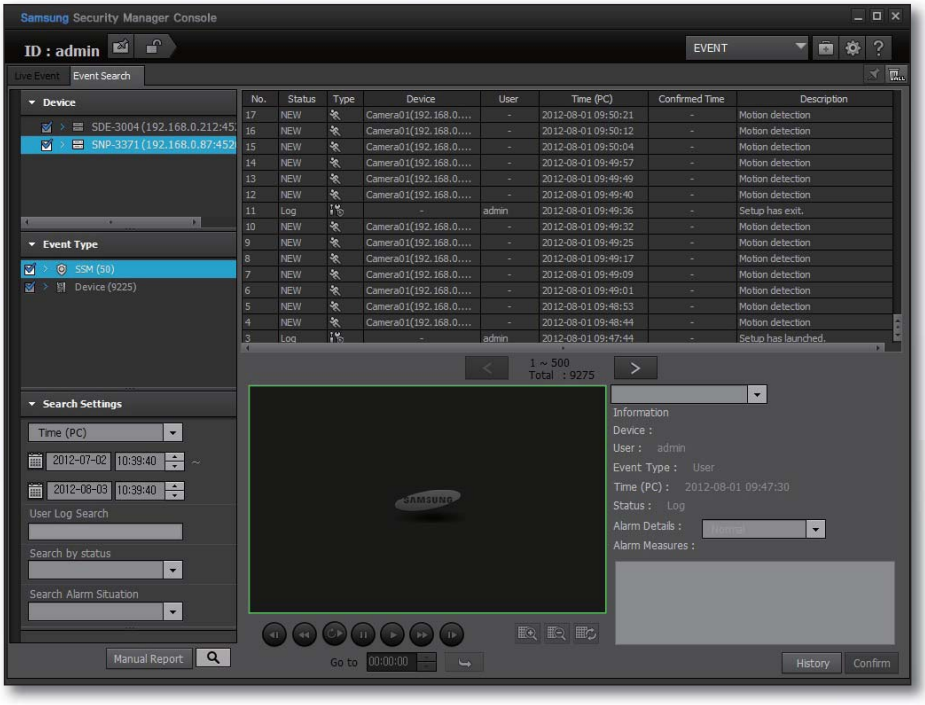


■ For further details on checking events, refer to "**Searching Events**". (Page 48)

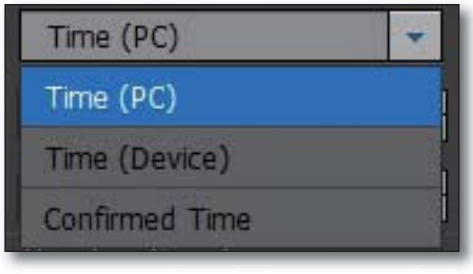
event viewer

Searching Events

Click Event Search tab to display event search menu.
You can specify event type and time for search.



1. Select desired event types by checking the checkboxes.
   - SSM : User, System
   - Device : System, Camera, Sensor, Alarm Out
     - Camera : Video Loss, Motion Detection, Audio Detection, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection
2. Filter by time to search logs.
   - Time (PC) : You can search for occurred time.
   - Time (Device) : You can run event search based on the device time.
   - Confirmed Time : You can run event search based on the confirmed time.



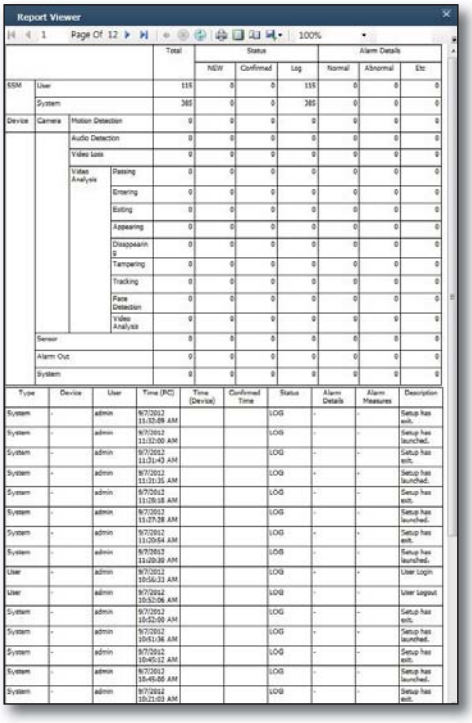
3. Use calendar to specify search date.
4. Specify the start time and end time.
5. Click the [**Search (**)] button.
   Events match the search criteria are listed.

■ Recorded video footage can be played with Event Viewer, Search Viewer and Instant Player. Note that one saved footage cannot be played with multiple viewers at the same time.

Viewing the Manual Report

Manual report can show all events and their statistics.

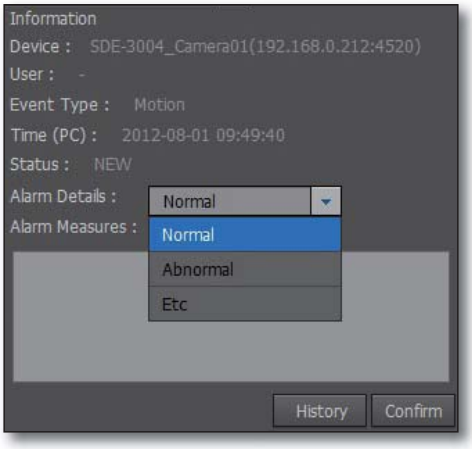
1. After setting <**Device**>, <**Event Type**> and <**Search Settings**>, click [**Search (**)] button.
2. Once event search found matches, click [**Manual Report**] button.
3. As needed, use shortcut buttons on the top side of the report to print, or save the report as excel / PDF / MS Word document file.



Confirming Events

You can check details of event searched in the list, and confirm it to end the event situation.

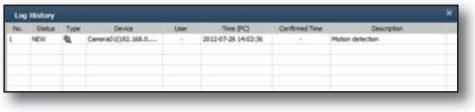
1. Double click an event to see its details from the list.
   In the event details pane, the event video is played as well as its details.
   - Or, select an event and right click on it to open <**Instant Viewer**>.
   - For further information on playback control, refer to "**Instant Player**". (Page 36)
2. Check event details and set <**Alarm Details**> to either one of <**Normal**>, <**Abnormal**> and <**Etc**>.
3. Describe the measures taken.
4. Click [**Confirm**] button.
   Once confirmed, it is marked in the list.



History

For confirmed events, you can see the confirmed details of the selected event from the list.

1. Select an event to see its history from the list.
2. Click [**History**] button.
3. Check event confirmation details.



- If user A described intrusion path in the Alarm Measures for an event, and user B added notes on further details of taken measure and confirmed that event, such process of alarm measure can be checked afterwards with History function.

search viewer

You can search and play footages stored in your local computer or in the device.
Select [**SEARCH**] menu of the viewer selection tab on the top right side of SSM Console.
Or, select [**SEARCH**] viewer on login screen of SSM Console.

NAMES AND FUNCTIONS OF SEARCH VIEWER

Item		Description
1	Device List	Shows devices that can be searched over.
2	Category	Shows available event types for search.
3	Date/Time	Dates with found matches from the selected device is marked on the calendar.
4	Timeline	Sets the search result list to timeline format.
5	List	Sets the search result to a list of events sorted by events.
6	Backup	Sets the time period for backing up searched data.
7	Detailed Timeline	Use this timeline slider to move selected search result's specific moment, or zoom in/out the timeline.

search viewer

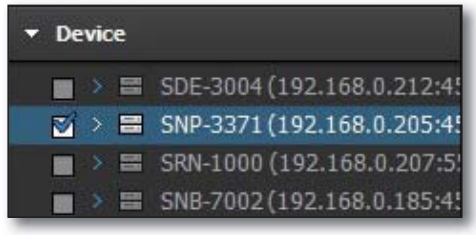
Item		Description
8	**Playback Control**	Playback controls for playing back search result.
9	**Display Pane**	Shows the video of searched result.
10	**Change Search Mode**	Select either one of Basic, Smart, Folder and POS search mode.

▪ The context menu appeared when right clicked on each menu item is the same to that of Live Viewer.

Device List

From the device list, you can select desired device for your search.

1. Search desired device from registered devices.
2. Refine your search by checking checkboxes of groups or devices.



Date Search

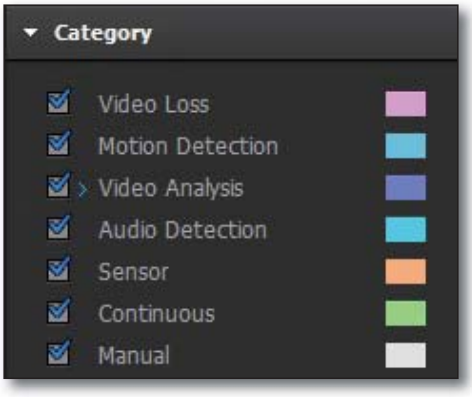
If selected device contains recorded data on a date, it is marked on the calendar.

1. Select a device and click [**Load (**)] button.
2. Select year and month for your search.
   If a date has recorded data, it is marked in color.
3. Click to select a date to be searched.
   Detailed time period of recorded data is shown in the search result area.

Category

You can set the search criteria with event types.

1. Click Category.
   Category items appear.
2. Select desired search category items.
   - Video Loss, Motion Detection, Video Analysis, Audio Detection, Sensor, Continuous, Manual : Searches selected items for the highlighted tile in the video display pane.
3. Search results matching selected items are shown in timeline.



Digital Zoom

Digital zooming provides enlarging the video as using a magnifier.

1. Click a desired camera's video.
2. Use digital zoom button to magnify/reduce desired portion of the video.
3. Brightness and contrast can be adjusted too.
   - Click [**Original Size (**)] button to reset to the original.

- For further details on using digital zoom, refer to "**Digital Zoom**". (Page 43)

Playing Searched Data

Setting the playback point of time

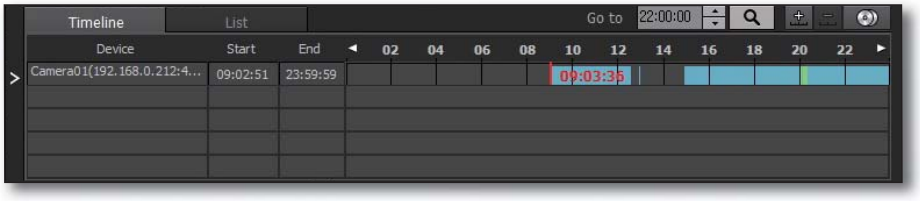
In the timeline of search result, the red vertical line means the current playback point of time.

1. Set the time to play.
2. Click [**Go to (**)] button on the right.
   The point of time for your playback is set to the chosen time.

- Or, drag the red strip or click on a desired point in the timeline to set playback point of time.
- The time display shows the current playback's record time.

Selecting Camera for Playback

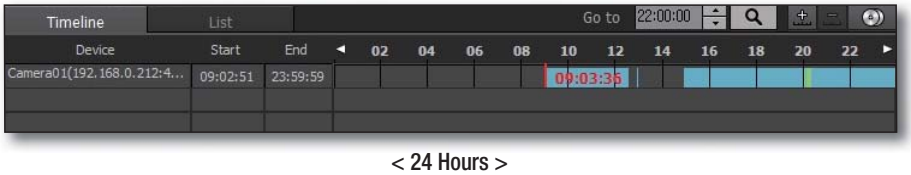
By default, the search result shows 5 channels in the list. You can resize it to show more or scroll down it. Video playback supports up to 16 simultaneous channels.



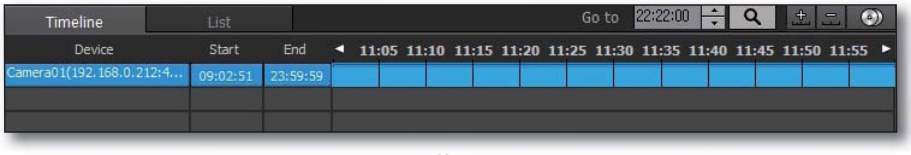
1. Double click desired camera in the search result.
2. Selected camera's video fills the first unoccupied video tile.

- Or, drag a camera from the search result to a tile and drop in the video display pane to add the selected channel's video to the tile.

Enlarging the Timeline Scale



< 24 Hours >



< 1 Hour >

1. Click [**Enlarge (Timeline) (** **)**] button in the top right corner of the search result area.
2. It enlarges the timeline scale of searched data from 24 hours to 5 minutes, the button becomes disabled when the maximum limit is reached.

Reducing the Timeline Scale

1. Click [**Reduce (Timeline) (** **)**] button in the top right corner of the search result area.
2. It reduces the timeline scale of searched data from 5 minutes up to 24 hours, the button becomes disabled when the minimum limit is reached.

Moving the playback point

When a search result is found, the playback point is set to the time currently selected.

1. Select a search result.
   The playback point is set to the time currently selected, marked with a red vertical line.
2. Drag the red vertical line to a desired point of time in the timeline.
   When in enlarged timeline, you can use <**Move (** , **)**> arrows on both ends of the timeline to move backward/forward.

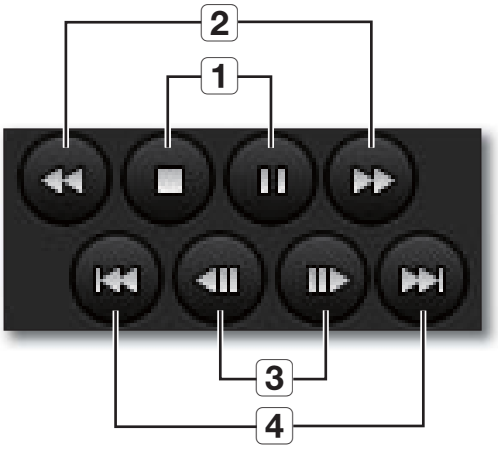
Playback Control

Pause or control playback speed.

Playback

1. Select a search result and click [**Play (** **)**] button.
   In the playback progress bar, the current playback speed is indicated.
2. Use playback control buttons to control playback faster or slower.

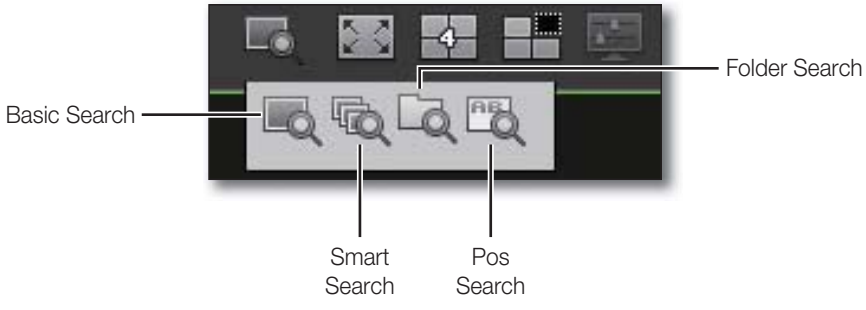
Names and Functions of Playback Controls



1	Start / stop playback, Pause
2	Faster forward / backward playback Sets the forward/backward playback speed to x1, x2, x4, x8, x16, x32, x64, and then x1 again on every click. ▪ When in paused, it switches to slower forward / backward playback button.
3	Step Forward / Backward Moves the video frame by frame. While in playback, these buttons are disabled.
4	Skip Forward / Backward Skips to previous or next event. While in playback, these buttons are disabled.

Selecting the Search Mode

Click Search Mode icon to select among Smart, Folder and POS search modes.



SMART SEARCH

You can run a time-based search over devices, which will show results in thumbnails.

Searching in Smart Search Mode

1. Set to Smart Search mode and select devices from <**Device**> list.
2. Set search year and month, and click [**Load (**)] button.
   Dates with recorded data are marked in the calendar. Select one to display data in timeline list.
3. In the timeline list, select a desired data item.
4. Use timeline bar to control preview display.
5. Specify the start time and end time for thumbnail view.
   - Up to 60 minutes can be assigned with start and end times.
6. Set the time interval.
   - In case the selected device supports motion detection, check <**Motion Search**> checkbox for motion search. For other devices not supporting motion search, the button is disabled.
7. Click [**Go to (**)] button.
8. Select a searched thumbnail to start playback in preview screen automatically.

search viewer

FOLDER SEARCH

You can run a search over folders storing recorded footages from the local computer running SSM Console.

Searching Folders

1. Set to Folder Search mode and select a folder from <**Folder**> list.
   Resulting footages are automatically listed in the timeline list.
2. Select a desired data from the timeline list.
3. Use playback control to play selected data.

POS SEARCH

You can search POS records based on time and text keyword.

▪ Search is enabled only for DVRs supporting POS functions.

Searching POS data

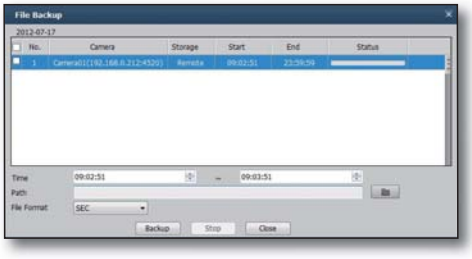
1. Set to POS Search mode and select date and time for your search.
2. Enter a search <**Keyword**>.
3. Set the search condition.
   - Find whole words : If not selected, blanks between keywords act as AND operator.
     Ex) If entered "Cash 2500", finds data contains both "Cash" and "2500" from the database.
   - Match case : If selected, the search becomes case sensitive, distinguishing upper and lowercase letters.
4. Click [**Search (**)] button.

BACKUP

You can back up the search data onto the computer that is running the program.

Backing Up Search Data

You can back up searched footage of selected period into a desired folder.



1. Click [**Backup (** **)**] button.
   The backup pop-up appears.
   - Backup is only available for devices currently connected.
2. Select a channel from the backup window.
3. Click [**Backup Path (** **)**] button to browse and set the desired backup storage path.
4. Specify the start time and end time.
5. Set the backup file format.
   Backup supports "*.sec" and "*.avi" formats.
   - AVI : A general video format. Can be played with Windows Media Player.
   - SEC : Samsung's proprietary format. Embeds self-executable video player with data.

   - The Microsoft Windows Media Player does not support AVI files having resolutions higher than 3Mega pixels. For high-resolution videos of more than 3 Mega pixels, SEC backup is recommended.
6. Click [**Backup**] button to start backing up.
7. Click [**Stop**] button to stop backup in the middle.
8. To end backup, click [**Close**] button.
   The backup stops and saves the file backed up at the moment, and closes the backup window.

schedule backup

You can schedule to backup recorded data of a device.

STARTING SSM SCHEDULE BACKUP

1. Click <**SSM Service Manager**> shortcut icon or expand and click "**Start > Samsung > SSM > SSM Schedule Backup**".
   The Login dialog should appear.
2. Enter the ID and password, and click [**Login**] button.
   - Default ID : admin
   - Default password : 4321

SSM SCHEDULE BACKUP SCREEN

Select Data Backup Time

Select desired recorded section of the device data.

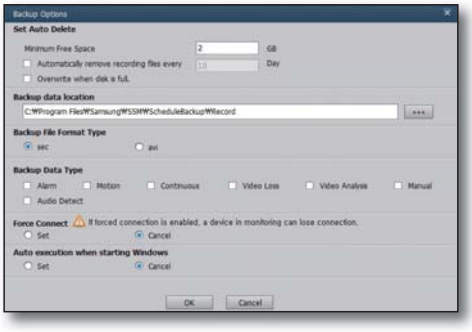
Backup Time Table

Sets on what time of a day the weekly backup from the device to the computer starts.

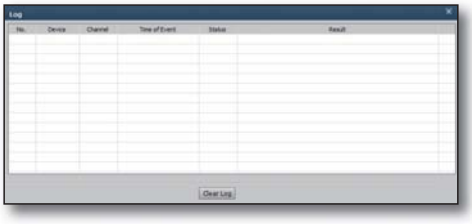
SCHEDULING BACKUPS

With storage devices among listed devices registered to the console, you can backup recorded data stored into a specific file location.

Setting the Backup Schedule



1. Click [**Backup Options**] button to set backup settings.
   - Set Auto Delete : You can set to delete outdated files automatically, based on time elapsed and remaining free disk space.
     - Automatically remove recording files every : If you specify the file retention period, the recorded data older than the specified period will be automatically deleted.
   - Backup data location : Sets the destination path for backup data storage.
   - Backup File Format Type : Sets the file format for backups.
     - For further details on backup formats, refer to "**Backing up Search Data**". (Page 59)
   - Backup Data Type : Select event types for backup.
   - Force Connect : Since simultaneous access of one device is limited, a problem may occur if the target device is occupied by another users. For such cases, this option sets to override and disconnect other user's access to continue the backup.
   - Auto execution when starting Windows : Sets whether to start the program when the installed computer has been started.
2. Select a device to be backed up from the list of devices.
3. Select channels by checking checkboxes from the channel selection window.
4. Select time cells for backup in the backup data time selection.
5. Click [**Start Backup**] button.
   The <**Status**> on the top side shows the backup progress.
6. To display backup logs, click [**Log**] button.
   The "**Log**" pop-up window appears.



settings

In Settings, you can configure the SSM Console for user accounts, device registration and event related settings.
Select [**Settings (** **)**] menu of the viewer selection tab on the top right side of SSM Console. Settings menu screen with tabs according to the corresponding function appears.

SITE/USER

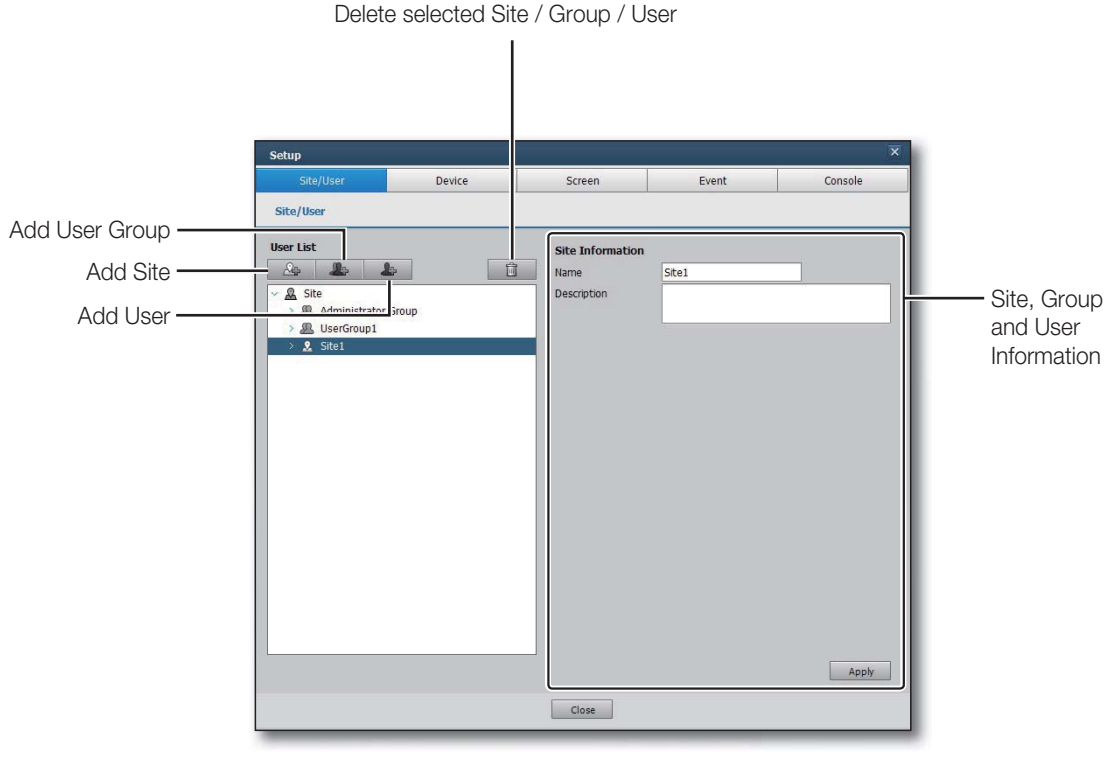
In SSM, user accounts are administered for each Site where a site is considered to be a physical administrative unit. User groups can be added to a site and all users should belong to user groups.

Using Site/User

- Administration by locations grouped by Sites
- Permission management for viewer functions
- Site Management (Add / Edit / Delete)
  - Name, Description
- User Group Management (Add / Edit / Delete)
  - Name, Description, Permission
- User Account Management (Add / Edit / Delete)
  - ID, Password, Name, Phone number, Address, E-mail, Description

Managing Sites

In the logical tree, a site can group camera and alarm out by location and it can help easier locating desired camera if there are many camera devices.

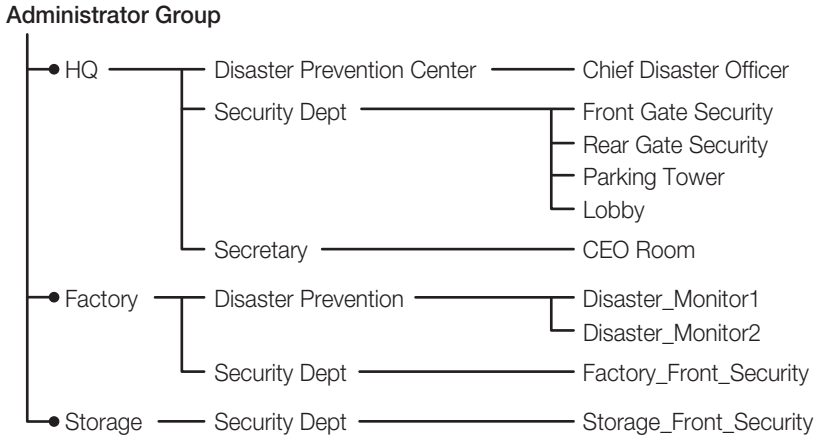


▪ The default topmost site is created in program installation process, which is not to be deleted.

Using Site/User Group

You can configure a site and user groups at your preference.
Ex.) Below sample construction shows sites of "HQ", "Factory" and "Storage", where each site includes user groups of "Disaster Prevention" and "Security Dept", and added with users of "Chief Disaster Officer", "Front Gate Security" and "Rear Gate Security".

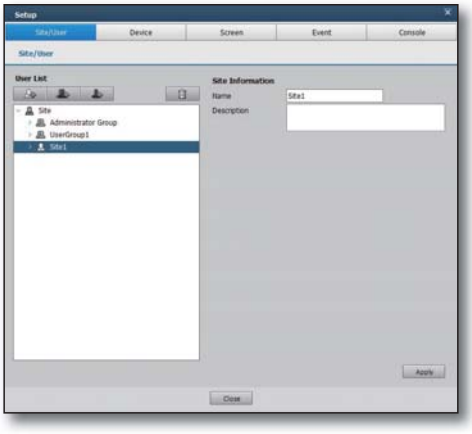
• **Site**



Setting a Site

To add a site:

1. Click [**Add Site (**)] button.
2. Enter the site name and description in the right pane.



To edit a site:

1. Select a site from the tree.
2. Edit site name and information on the right.
3. When finished, click [**Apply**] button.

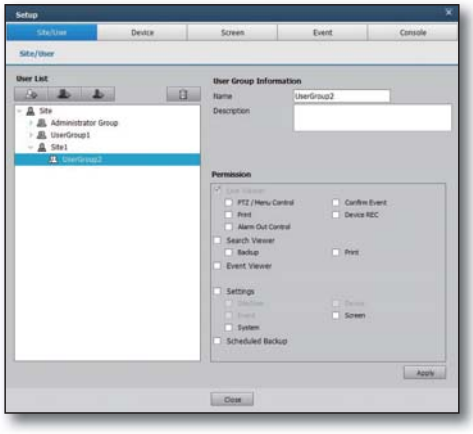
To delete a site:

1. Select a site from the tree.
2. Click [**Delete (**)] button.

Setting a User Group

To add a User Group:

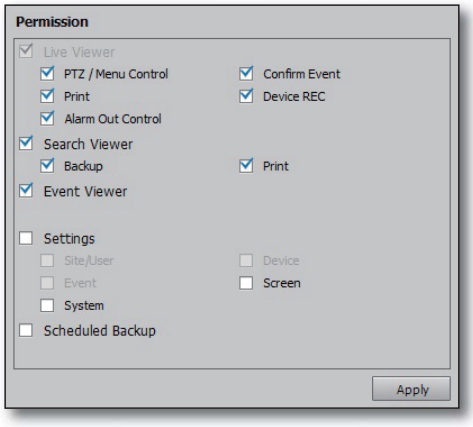
1. Select a site in the tree and click [**Add User Group (**)] button.
2. Once a user group is created under a site, enter the group name and description, and set the privilege.
3. When done, click [**Apply**] button.



- The default "**Administrator Group**" is created in program installation process, which is not to be deleted.

To edit User Group privilege:

1. Select a user group under a site from the tree.
2. Edit the user group's information on the right pane.
3. Select allowed privileges by checking checkboxes.



- For "**Administrator Group**", changing privilege is not allowed.
- Setting privilege is only available in user group information.
- Live Viewer is allowed by default, and cannot be disallowed.

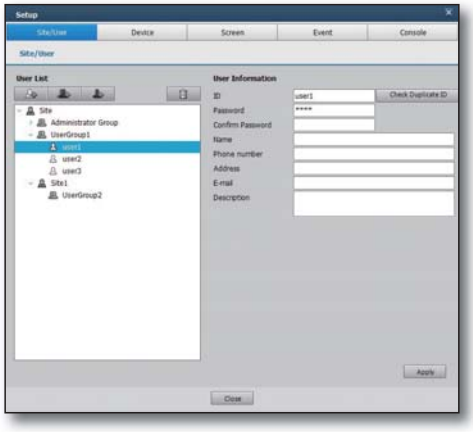
4. When done, click [**Apply**] button.

To delete a User Group:

Select a user group to be deleted, and click [**Delete (**)] button.

To add a User:

Select a user group in the tree, and click [**Add User (**)] button. A new user is created under the selected user group.



- The default "**admin**" account is created in program installation process, which is not to be deleted.

To edit user:

1. Select a user from a user group in the tree.
2. Edit user ID, password, name and other fields on the right pane.
3. When done, click [**Apply**] button.

- The "**Administrator Group**" has all privileges, and users in the "**Administrator Group**" are allowed with all privileges accordingly.

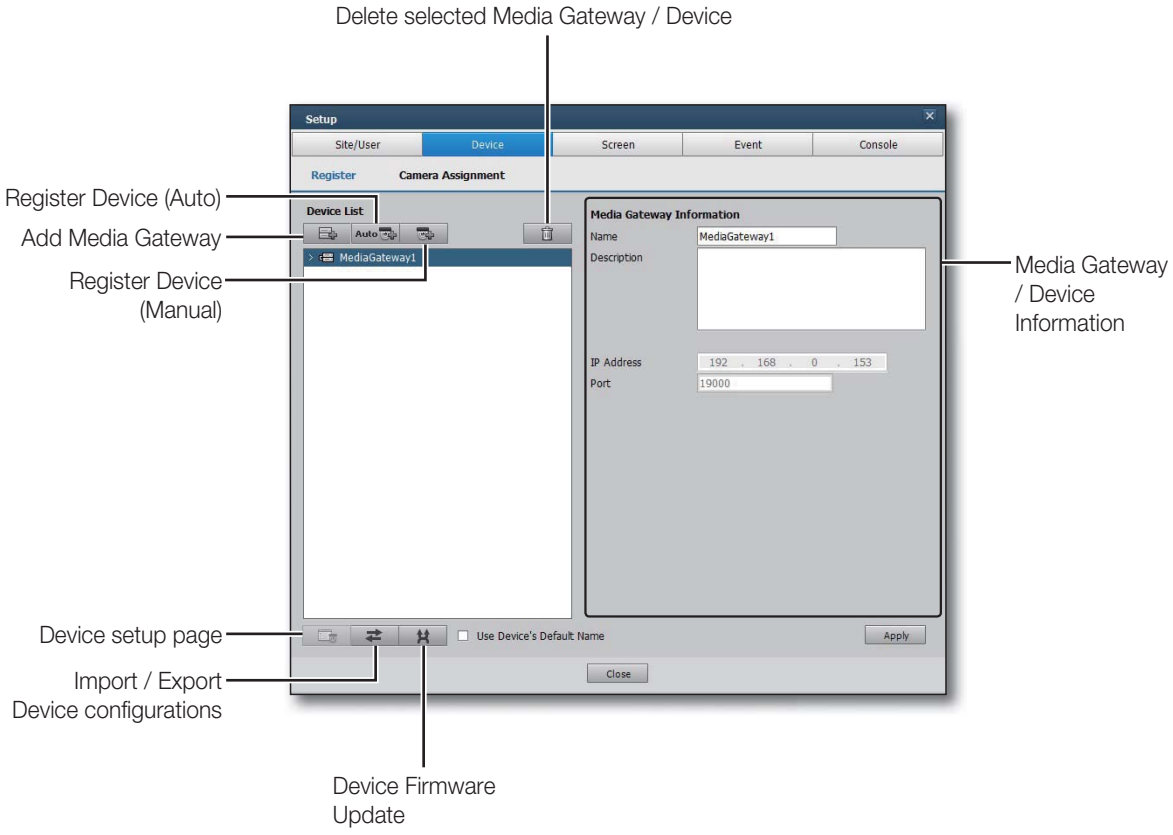
To delete a user:

You can select users registered to a group to delete.
Select a user to be deleted, and click [**Delete (**)] button.

DEVICE

Device Registration

Shows devices registered by users.
Adding device is enabled when <**MediaGateway**> is selected from the tree menu.

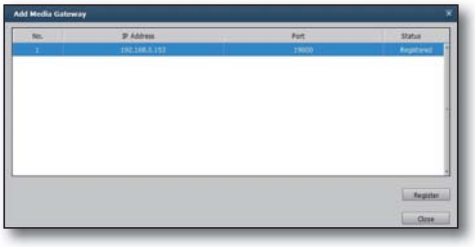


- The Media Gateway connects to cameras, DVRs and other devices and relays media communication. Proper Media Gateway should be selected when registering device to the Console since a Console should be connected to the Media Gateway for communication instead of connecting to actual devices.

Setting the Media Gateway for Standalone Installation

To add a Media Gateway:

1. Select a site from the tree.
2. Click [**Add Media Gateway (**)] button.
3. Select a desired Media Gateway from the list and click [**Register**] button.
4. To finish registration and close the window, click [**Close**] button.

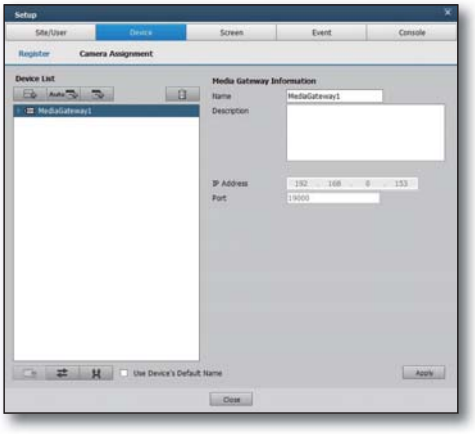


To edit Media Gateway information:

The right pane shows information on the Media Gateway selected from the tree menu, which is available to edit.

1. Click on a desired Media Gateway to be edited.
2. Edit name and description of the selected Media Gateway.

- IP address and port is only for viewing, not editable.



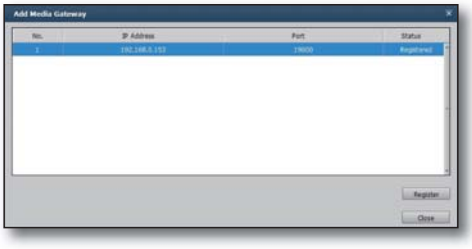
To delete a Media Gateway:

Select a Media Gateway to be deleted, and click [**Delete (**)] button.

Setting the Media Gateway for Distributed Installation

1. Run the Service Manager on the computer installed with the System Manager. (Page 84)
2. Run the Service Manager on the computer installed with the Media Gateway. (Page 84)
3. On the Media Gateway server, set the IP address and port number of computer installed with the System Manager. (Page 85)

To add a Media Gateway

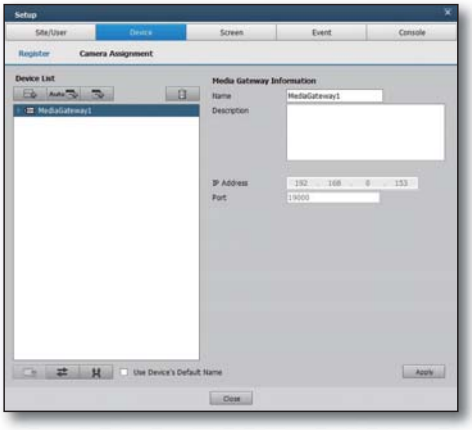


1. Select a site from the tree.
2. Click [**Add Media Gateway (**)] button.
3. The list of available Media Gateways added to the System Manager to where the Console is connected appears.
4. Select a desired Media Gateway from the list and click [**Register**] button.
5. To finish registration and close the window, click [**Close**] button.

Adding Devices

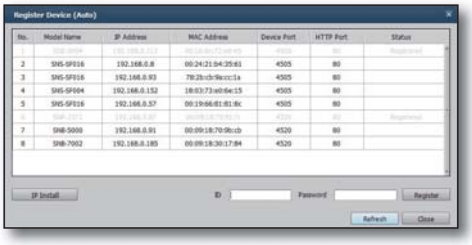
To add a device automatically:

You can search add a device connected to your local network automatically.



1. Click [**Register Device (Auto) (** Auto)] button.
   All discovered devices from the local network are shown in the "**Register Device (Auto)**" list.
2. Select desired device to be registered from the list.
3. Enter the ID and password, and click [**Register**] button.

- The User ID and password should be the account registered to the corresponding device.
- If connection encounters error, corresponding message of cause is displayed in the status tab.



4. Once registered, it is marked as "**Registered**" in status tab, and added under the Media Gateway list.
5. To finish registration and close the window, click [**Close**] button.

To add device manually:

Device can be registered manually by a user, by directly entering required information.

1. Click [**Register Device (Manual) (** **)**] button.
   "**Register Device (Manual)**" window should appear.
2. Select the desired device's model name.
3. Select the address type.
   - Available types are static IP, URL, SamsungDDNS, S1 DDNS, and iPOLiS DDNS.
   - Available address type can be different depending on the device.
4. Provide required information for connection to the device.
   - Required information is dependant to the set address type.

5. Enter the ID and password.
   - The User ID and password should be the account registered to the corresponding device.
6. Click [**Register**].
   - If connection encounters error, corresponding message of cause is displayed.

- When registered a device, it is assigned to the Administrator Group automatically.

Editing Device Information

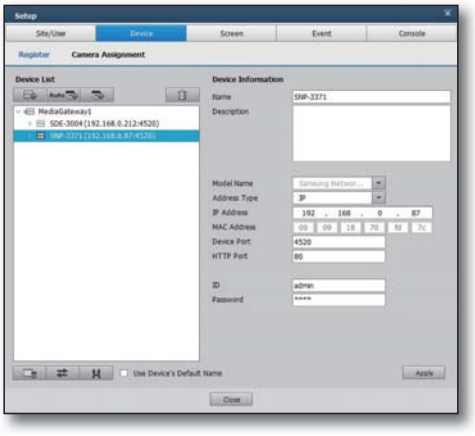
You can edit information of a device registered.

To edit device information:

1. Select a desired device to be edited.
2. In the right information pane, edit the device information.
3. When finished, click [**Apply**] button.

To use the device's default name

Check <**Use Device's Default Name**> option to name the device as its default, which will be displayed in the device list or on the screen.

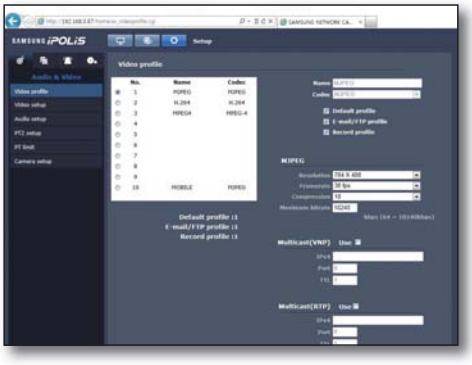


Viewing the Device Settings

You can see the device related settings information on the Settings Page provided by each device.

To edit device settings:

1. Near the bottom of the tree menu, click [**Device setup page (** **)**] button.
   The selected device's settings page should appear.
2. Edit settings as required.
3. When finished with device settings, click [**Apply**] button of the device settings page.
4. To close the device's settings page, click [ ] button on the top right corner.
   - Device settings page differs from devices connected. For further details, refer to the user manual of each device.



Deleting a Device

You can delete a device, camera or alarm objects.
Actual deletion is made by device.

1. Select a device to delete from the tree.
2. Click [**Delete (** **)**] button.
3. When confirmation prompts, click [**Yes**].
   - If the related camera is in playback or recording, it automatically aborts.

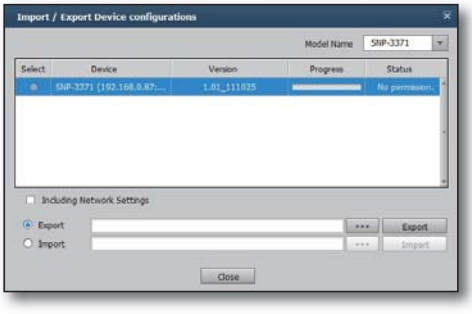
Managing Device Settings

You can import device settings from a file, or export it in *.dat format.

Exporting Device Settings

You can save your device's settings information as a file.

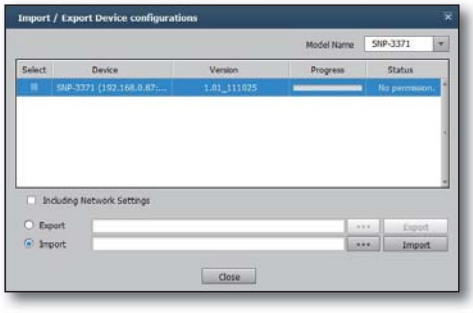
1. Select desired device to export its settings.
2. Click [**Search Path (** **)**] button to browse and set the desired file path.
3. Click [**Export**] button.
   The settings are exported into a file, and its result is displayed as a message.



Importing Device Settings

You can import device's settings information from a file.

1. Click [**Search Path (** ••• **)**] button to browse and set the desired file path.
2. Select a settings file.
3. Click [**Import**] button.
4. Imports the settings from the selected file.

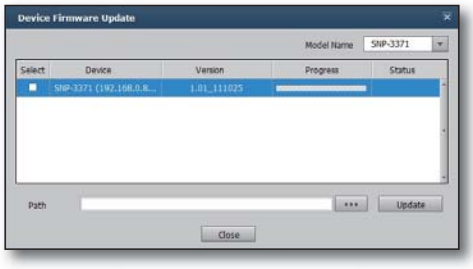


- If checked <**Including Network Settings**>, imports network environment settings too.
- Importing for multiple devices is allowed, where exporting limits to one device at a time.

Updating the Device Firmware

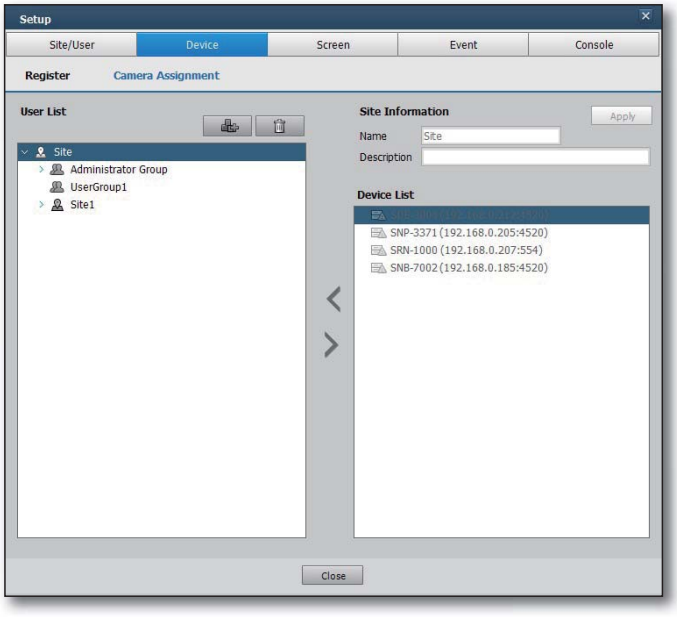
In Update window, only devices currently connected are displayed.

1. Select a device to update.
2. Click [**Search Path (** ••• **)**] button to select update software of newer version.
3. Click [**Update**] button.
4. During the updating, the progress bar shows the progress.



Assigning Cameras

Assign devices and cameras allowed to user group.
A list of devices allowed to the selected user group appears.
Select devices to add to the list for a group to allow accessing.



To add allowed camera:

1. Select a user group to be assigned with the camera.
2. From the device list, select devices to be added.
3. Click [**Register Device (**)] button.
4. Click [**Release Device (**)] button to cancel assigned camera.

▪ After assigning devices to a user group, you can set individual camera's availability.

SCREEN

Setting Layouts

You can edit the screen to display desired cameras in one screen.
Create a layout, and check cameras included in the layout and view the site composition.
You can create and manage multiple layouts tailored for each monitoring location for easier access.

Adding Layouts

1. Select a user group in the tree which is to be added with new layout and click [**Add Layout (**)] button.
2. Select either one of camera layout and map layout, name the layout and click [**OK**] button.
   - Camera Layout : The layout consists of video screens of cameras selected from the device list.
   - Map Layout : The layout is made from a map registered, by locating desired camera and sensors on the map.

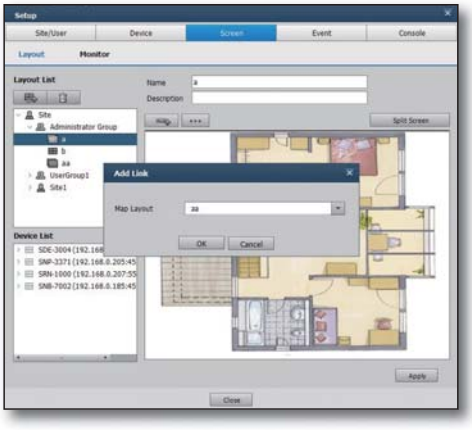
Map Layout

Create a Map Layout, and click [**Search Path (**)] button to add a map image to the layout. Click [**Add Link (**)] button to add links between map layouts.

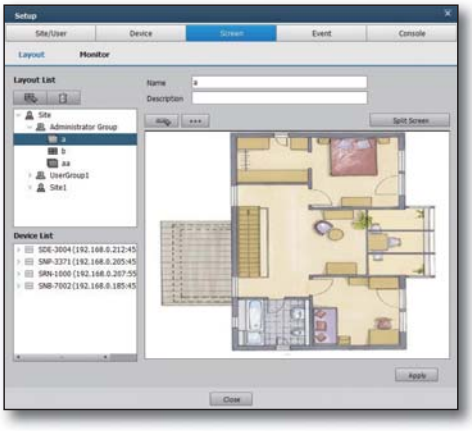
To add a map and place links:

1. Select a user group to be added with a map layout, and click [**Add Layout (** **)**] button to create one.
2. Click [**Split Screen**] button and select a desired layout split mode.
   - In the split screen selection pane, the tile marked with sky blue is the destination tile of added map image.
3. Select the newly created map.
4. Click [**Search Path (** **)**] button to browse and set the desired map image file.

5. Click [**Add Link (** **)**] button.
6. Once the "**Add Link**" window appears, name the map to be linked and click [**OK**] button.



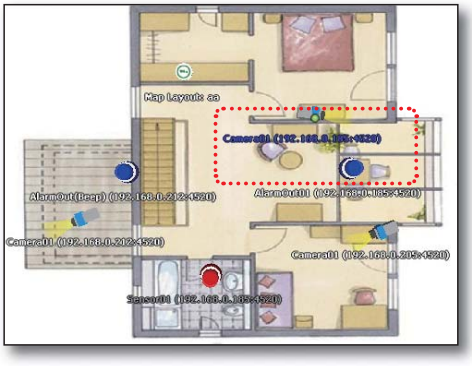
7. A link icon is added onto the map, and clicking it on the viewer's map layout moves to the linked map.



- Place mouse cursor on the top right corner of the map layout to display screen adjustment dialog.
  For further details screen adjustment on map layout, refer to "**Monitor Expansion**". (Page 27)

To add devices to a map:

1. Once completed with adding a map, click devices to be added from the device list.
   - In the device list, devices included in the group to where the layout is registered.
2. Click a device and drag it onto the desired position on the map, and release the mouse.
   You can add any device of camera, alarm or sensor.
   - Camera
     - You can distinguish cameras, and identify whether the camera is connected to the network.
     - You can identify cameras with events.
     - You can identify camera names.
     - Camera information can be viewed.
   - Alarm
     - You can distinguish alarms, and identify whether the alarm device is connected to the network.
     - You can identify alarm device names.
     - You can turn ON/OFF alarm.
3. Click device icon with your left mouse button.
   Green ball that controls camera framing appears.
4. Click the green ball, and it turns red. While in red, drag and drop the ball to adjust camera's viewing direction.
   - Click a camera, drag and drop while holding to move the camera's position.
5. When done with setup, click [**Apply**] button.

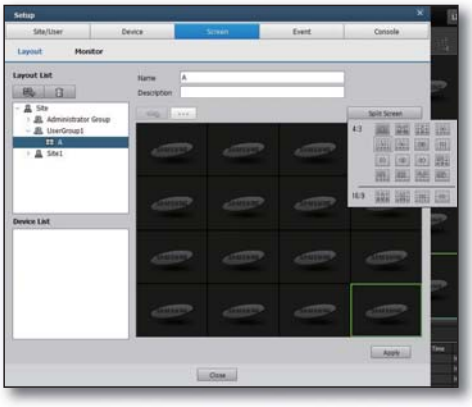


Camera Layout

Create a Camera Layout, and place the cameras in the desired tile of split screen to compose various layouts.
The device list only shows devices available for adding to the layout currently being edited, in a tree format.

To add a camera layout:

1. Select a user group to be added with a camera layout, and click [**Add Layout (** **)**] button to create one.
2. Click [**Split Screen**] button and select a desired layout split mode.
3. Drag a desired device from the device list, and drop in onto a tile.
4. When done, click [**Apply**] button.



Deleting Layouts

Select layout to be deleted, and click [**Delete (** **)**] button.

Monitor

The monitor layout can display up to 100 channels on a maximum of 4 monitors.

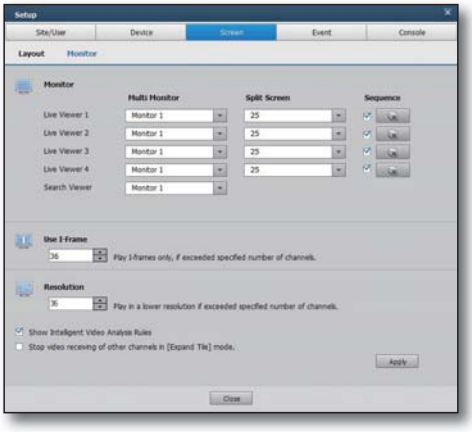
Multi Monitor

Up to 4 monitors can be connected.

Split Screen

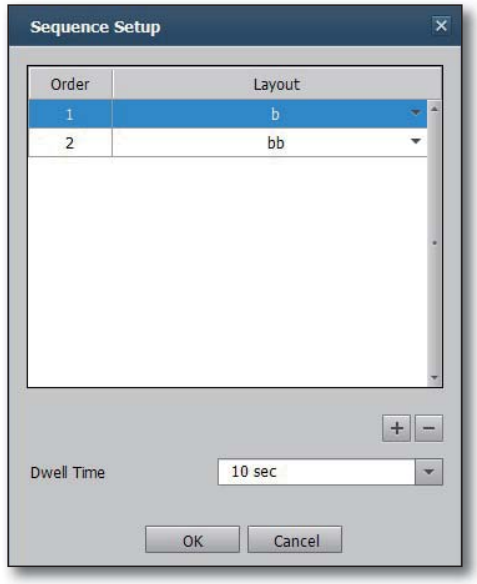
Sets the split screen mode for each viewer / monitor.
The available split screen modes differ by maximum number of channels and connected monitors.

- The default settings may not be appropriate to your configurations; user must configure the system appropriately for proper operations.



Sequence

Distributes camera feeds to fit the selected split screen mode in sequenced order automatically, at the specified duration.



- Sequenced mode is available only for a camera layout.

To define sequence:

1. Click [**Sequence Setup (**)] button on the top right corner of the target monitor.
2. To add a layout, click [**Add (** + **)**] button. To delete a layout, click [**Delete (** − **)**] button.
3. Click <**Dwell Time**>'s [ ] button and set the dwell time of each layout added.
4. When done with setup, click [**OK**] button.
5. To apply the sequence mode, check the checkbox in front of the sequence setup button.

Using I-Frame

Set the number of channels, the I-Frame mode will be applied for more than the specified channels.
It is applied to each monitor of each viewer.
It is used to avoid system overload of multi-channel video monitoring.

- **What is I-Frame?**
  Video compression methods hiring H.264 and MPEG4 codecs produces compressed video of one base frame (Intra-frame) and multiple predictions (predicted frames) only containing differences between each frame's previous one.

Resolution

Set the number of channels, low-resolution will be applied for more than the specified channels for better communication.
It is applied to each monitor of each viewer.

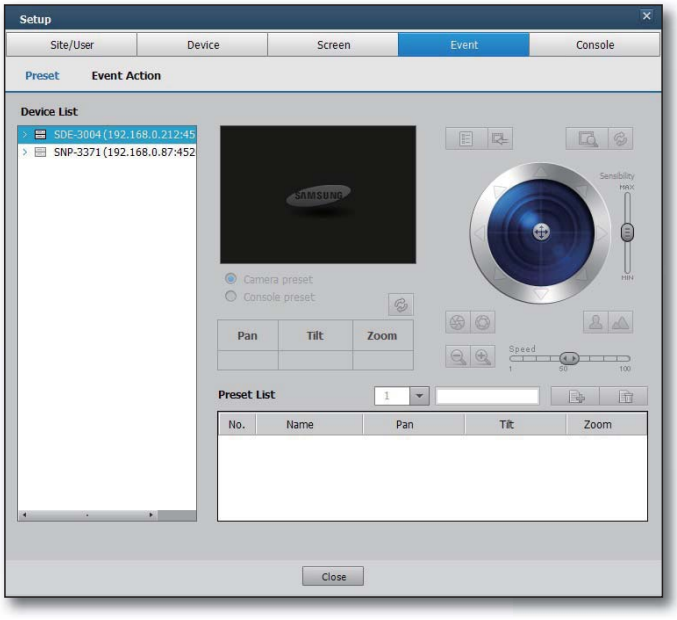
- Show Intelligent Video Analysis Rules : Sets whether to display Intelligent Video Analysis Rule applied for the video.
- Stop video being receid from other channels in [Expand Tile] mode. : Sets whether to receive video from channels other than the expanded when viewing one channel in [**Expand Tile**] mode of Live Viewer.

EVENT

Setting Presets

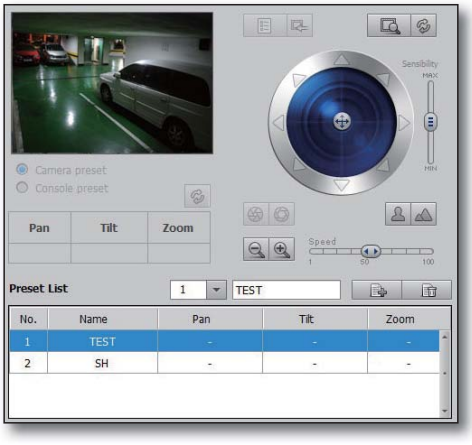
For PTZ control supporting cameras, you can add or delete preset positions for direct camera framing.

- The PTZ preset screen becomes available for settings, only when a PTZ supporting camera is selected.
- You can distinguish PTZ controllable cameras by icon appeared on the device list. (Page 25)



To add a preset:

1. Select a desired camera from the <**Device List**> to define a preset.
2. Use PTZ controller to set the camera framing to a desired point, and enter the preset name.
3. Click [**Save Preset (**)] button.
   In the preset list, added one appears.
4. To delete a preset, select the preset to be deleted, and click [**Delete Preset (**)] button.



- For further information on PTZ controller, refer to "**PTZ Control**". (Page 31)

What is Event Action?

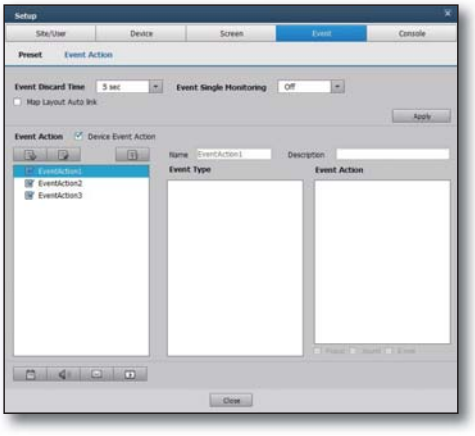
The event action defines how the system acts (output) upon a specific event (input).

- Event Settings
  - A single monitoring setting. Upon an event, the Live Viewer monitoring screen automatically switches to Single mode with the event-generating channel for the specified period.
  - For specified interval (5~60 seconds), system ignores the same continuing event.
  - You can set whether to use the device's event settings.
- Event Action
  - Event Action Management (Add / Edit / Delete)
    - Name, Description, Event (Input), Action (Output)
  - You can define various system actions (output) for events (input) from devices.
    - Event (input) types: Motion Detection, Video Loss, Video Analysis, Audio Detection and Sensor
    - Action (output) types: Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification

Setting Event Action

Event Discard Time

If the same event occurs within a short time period, such events can be caused by one actual event. You can set the time to discard such same events.



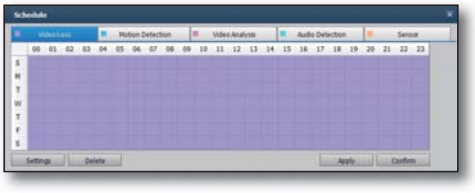
Event Single Monitoring

Upon an event, the Live Viewer monitoring screen automatically switches to Single mode with the event-generating channel for the specified period, which returns to previous mode afterwards.

- Map Layout Auto link : If this option is set and an event occurs while viewing a map layout, the view automatically switches to the corresponding map which contains the event-generating device's icon on it.

Event Action

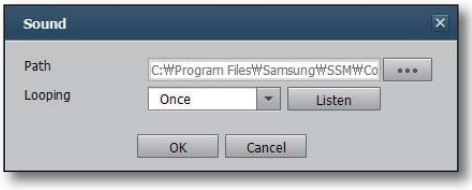
- Schedule ( ) : The scheduler window appears, set the time to run the event action.



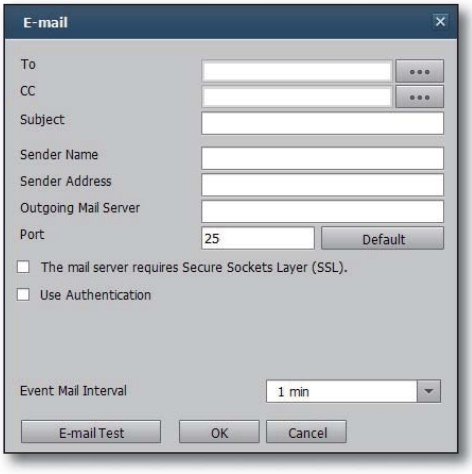
To set the schedule

1. Click [**Schedule (** **)**] button to open the "**Schedule**" window, then edit event schedules for each event type.
2. Click and drag to select time cells in a schedule tab, and click [**Apply**] button.
   To deselect time cells, click and drag to select again and click [**Delete**] button.
3. To finish settings and close the "**Schedule**" window, click [**Confirm**] button.

- Sound ( ) : Set the sound device for the event, and how the sound repeats.

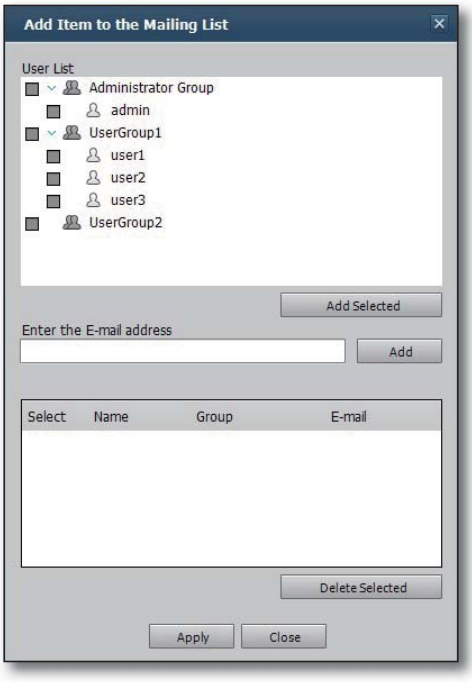


- E-mail ( ) : The recipient will receive an event notification mail and its repeating interval. Set the recipient's E-mail address, sender's address and repeating interval for event notification mails.

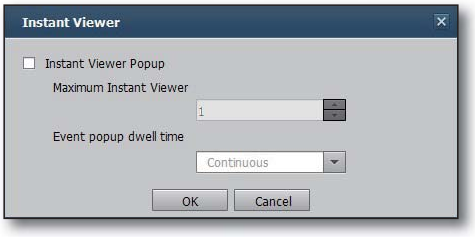


To set the E-mail notification:

1. To add E-mail addresses of recipient or copied recipients, click [**Search Path (** **)**] button.
2. Once the "**Add Item to the Mailing List**" pop-up appears, select recipients and [**Add Selected**] button.
3. To add a recipient other than listed, enter the E-mail address manually and click [**Add**] button.
4. To delete items from existing recipients, select one and click [**Delete Selected**] button.
5. When done, click [**Apply**] button.
6. In "**E-mail**" window, complete entering E-mail address and repeating interval, and click [**OK**] button.



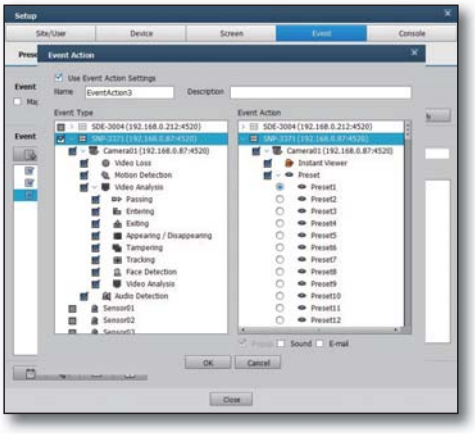
- Instant Viewer ( ) : If selected <**Instant Viewer**>, set the maximum number of simultaneous instant viewers allowed and minimum dwell time of event pop-up dialog.



To add an event action:

You can add/edit event actions.
Select event type, device of action, and specify action details accordingly.

1. Click [**Add Event Action (** **)**] button.
2. Click [**Edit Event Action (** **)**] button.
   The "**Event Action**" setup window appears.
3. <**Use Event Action Settings**> sets whether to use event actions defined.
4. Enter the name and description of the event action added.
5. In the <**Event Type**>, select devices and their event types by checking the checkboxes.
   - Video Loss : If the video recording is interrupted, an event is generated.
   - Motion Detection : If the device detects a motion, an event is generated.
   - Video Analysis : Runs video analysis and recognizes events from the result.
   - Audio Detection : If the device detects sound, an event is generated.
   - Sensor : Generates an event upon signal input from sensor device.



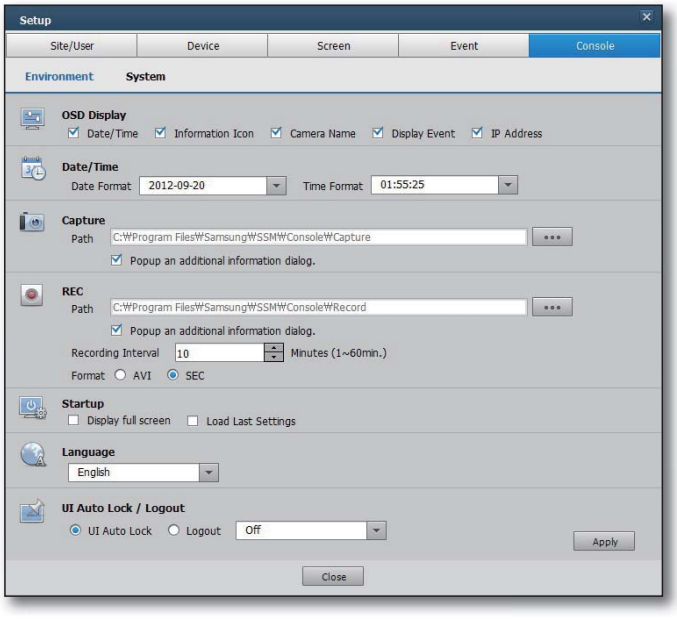
6. Set the action device and action method of an event type.
   - Instant Viewer : Opens the "**Instant Viewer**" window in the Live Viewer, which shows the occurred event's video.
   - Preset : Runs selected preset on the selected camera.
   - Popup : Automatically selected along with Instant Viewer option. If selected individually without selecting Instant Viewer, an empty Instant Viewer having no video displayed upon an event only for reacting to the occurred event.
   - Sound : Generates sound alarm upon events.
   - E-mail : Sends out event notification e-mail upon events.
7. To finish settings and close the window, click [**OK**] button.
   Defined event action is listed in the <**Event Type**> and <**Event Action**> lists.

To delete an event action:

Select an event action to be deleted, and click [**Delete Event Action (** **)**] button.

CONSOLE

Environment



OSD Display

Sets whether to display on-screen display menu and icons on the video screen, such as date, camera name and other information.

Date/Time

Set the date and time format displayed on OSD.
Date / Time indication is based on the time of running the pop-up window.

- Date formats
  2010-04-19 (yyyy-mm-dd)
  04-19-2010 (mm-dd-yyyy)
  19-04-2010 (dd-mm-yyyy)
- Time formats
  08:06:04 (hh:mm:ss)
  08:06 (hh:mm)

Capture

You can set the captured image file's path.

- Path : Shows the current file path, click [**Search Path (** ••• **)**] button to set to another file location.
  - Click <**Popup an additional information dialog.**> to display saved path and additional capturing information on a popup window separately when capturing a monitoring window.

REC

Set the selected recording data's file path and recording interval.

- Path : Shows the current file path, click [**Search Path (** ••• **)**] button to set to another file location.
- Recording Interval : Sets how long the recording will continue.
- Format : Sets the file format for recording.
  - Click <**Popup an additional information dialog.**> to display saved path and additional recording information on a popup window separately when recording a monitoring window.

Startup

Configures the screen display and its settings when the program is started.

- Display full screen : On the program's startup, it fills the entire screen automatically.
- Load Last Settings : When restarting, it loads the last displayed camera's video layout.

Language

Sets the language used for Samsung Security Manager's user interface.

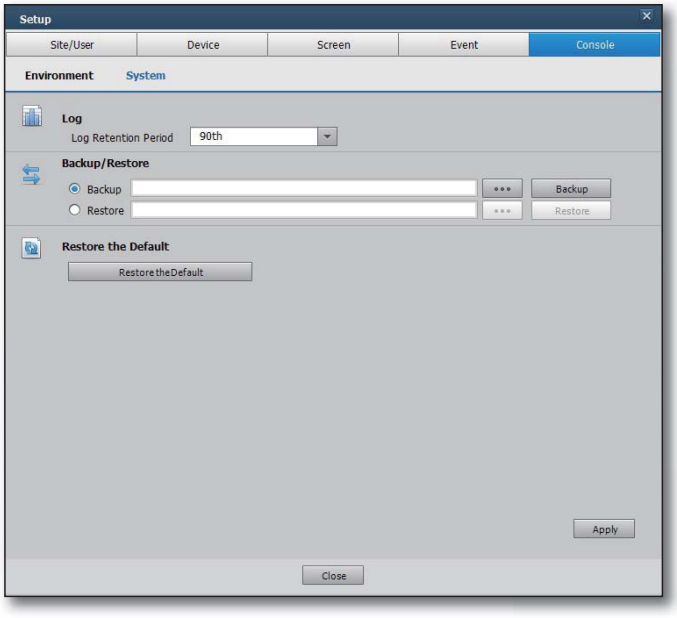
UI Auto Lock

If there is no keyboard or mouse action for the specified period, it locks user interface automatically which prevents unintended access.

Logout

If there's no keyboard or mouse action for the specified period, it logs out automatically to prevent unintended access.

System



Log

You can set the log retention period, which sets to delete expired log files automatically.

Backup/Restore

You can back up the current settings or restore the SSM Console setups from a saved file.

- Backup : Selecting this item disables the button. Set the backup file path and click [**Backup**] button to start backup into the specified file path.
- Restore : Selecting this item disables the button. Set the restoration file path and click [**Restore**] button to load setup from the specified backup file.

Restore the Default

Initializes SSM Console program's setup to the default settings.

SSM service manager

You can check SSM related services, and stop them.
The Service Manager should run while the Samsung Security Manager is running at the same time, and an icon appears in the task tray.

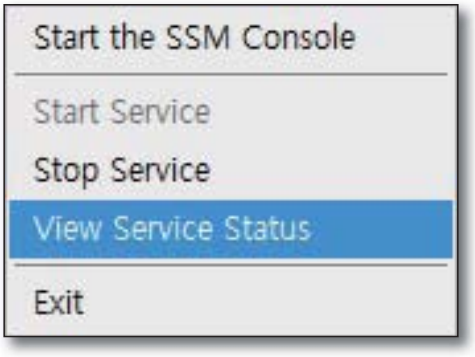
SERVICE MANAGER

Resides in the task tray, and provides access to Samsung Security Manager services.

Managing the Services

Select the icon and right mouse click.
Service menu should appear.
You can start or stop services.

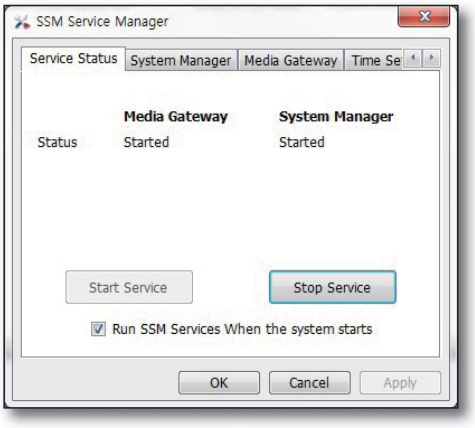
- Start the SSM Console : Runs SSM Console program.
- Start Service : Starts Media Gateway and System Manager services.
- Stop Service : Stops Media Gateway and System Manager services.



Service Status

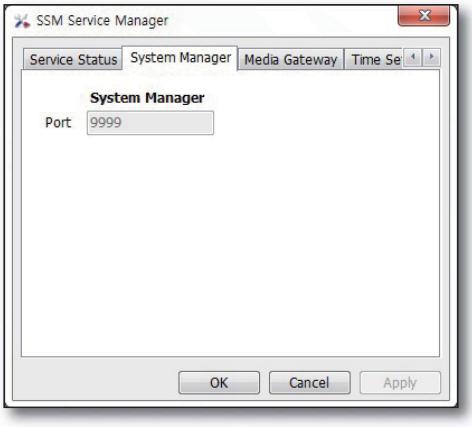
Click [**Service Status**] to open SSM Service Manager information dialog.

- Start Service : Disabled if the service is running.
- Stop Service : Disabled if the service is stopped.
- OK : Applies the changes, and closes the window.
- Cancel : Does not applies the changes, and closes the window.



System Manager

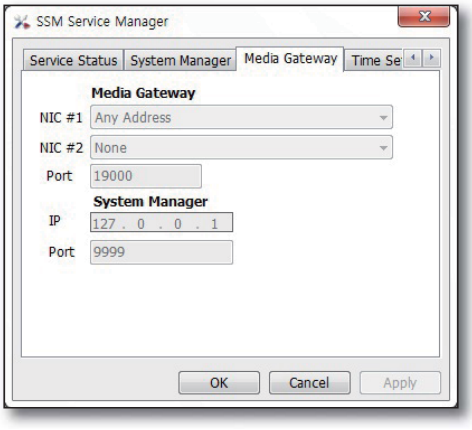
You can check or edit the port number for connecting to the System Manager.
Port for connection to the System Manager, for distributed installation type.



Media Gateway

You can check or edit the NIC settings and port number used by the Media Gateway.
You can check or edit IP address and Port number of the System Manager to where a Media Gateway connects.
For standalone installation, they are properly configured by default.
For distributed installation, configure these items appropriately.

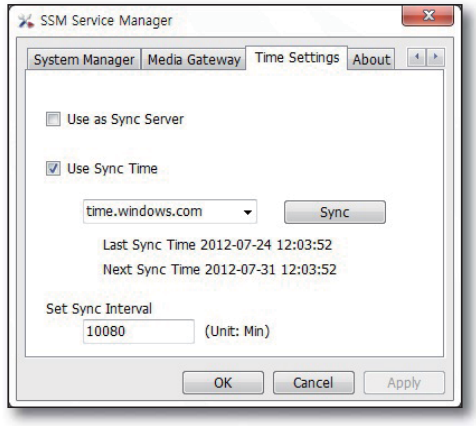
- For distributed installation, the System Manager and Media Gateway may require exception setup for firewalls if involved. If an active firewall blocks communication ports, the Console fails to access servers.



SSM service manager

Time Settings

You can set the computer installed with SSM to be the NTP time server, and its checking frequency.



About

Shows the Service Manager's version information.

appendix

PRODUCT SPECIFICATION

Features		
Video	Supported Video Compression Format	H.264, MPEG-4, MJPEG
	Supported resolution	Depending on the device
Audio	Supported Audio Compression Format	G.711 μ-law (PCM), G.723, G.726 (ADPCM)
	Functions	Bi-directional audio (Listen/Talk)
Live Monitoring	Multi-monitor	Up to 4 monitors (Follow the recommended system requirement)
	Screen-split mode	4:3 screen modes : 1/4/6/8/9/10/13/16/17/21/25/36/49/64 16:9 screen modes : 6/12/20/30 Full screen mode * While in multi-monitor environment, layouts and split modes for less than 100 channels will be available.
	Sequence mode	up to 16-splits per monitor
	PTZ Control	Area Zoom, Go to 1x zoom, PTZ Sensitivity, Focus, Zoom, Patrol, Swing/Autopan, Group/Scan, Trace/Pattern, Preset, Iris control
	Map monitoring	Split View Mode for Map Layout, 2D/3D View, Zoom in/out, video popup(Instant viewer), Camera/Sensor/Alarm icons on the map
	Simple Recording	Recording of the selected video tile during 1hour
	Functions	OSD On/Off, Snapshot / Prints Image, Brightness/Contrast control, Keep Aspect Ratio/Original size, Deinterlacing, Flip, Digital zoom
Search & Playback	Search mode	Date, Event, Smart Search, POS Search based on DVR, NVR, Local folder
	Screen-split mode	Up to 16 footages can be played simultaneously
	Video Control	Start/stop, Pause, Faster/Slower forward/backward, Step Forward/Backward, Skip Forward/Backward
	Functions	Snapshot / Prints Image, Digital zoom
	Backup	Local storage, back up format(AVI, SEC) Configurable schedule for backup (*supported model only)

appendix

Features		
Event Monitoring	Real-time event list	Shows real-time event list of the device(event status, type, device, user, time(PC)), Viewing instant video image
	Searching events	- SSM : User, System - Device : System, Camera, Sensor, Alarm Out - Camera : Video Loss, Motion, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection
	Reporting	Manual report (show events and statistics) print & Save function, format(excel, PDF, word)
	Confirming	set alarm details Normal/Abnormal/Etc, confirm action
	History	the confirmed details of the selected event from the list
	Instant Viewer	Display the selecting camera. Confirm the event, record event remarks and end the event status.
	Instant Player	Plays the corresponding camera's video image
	Event Action	Define various system actions (output) for events (input) from devices, action (output) types: Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification
Configuration		
Site/User management		Site/User group/User account management, Permission management for viewer functions
Device management		Automatic device IP scanning, Viewing the device settings(Device webpage), Exporting/Importing devices settings, Updating the device firmware
Screen management	Layouts	Setting/Adding/Deleting Layouts, Map/Video Layout
	Monitor	Multi Monitor, Split Screen, Sequence, Using I-Frame, Using low-resolution
Environment		OSD display, Date/Time, Capture, Recording, Sartup, Language, UI auto lock, Log
System settings		Backup/Restore SSM setups, Restore the devault settings
Time synchronization		NTP Server, Client
Update		Automatic self upgrade(Connection to Samsung upgrade server)
General		
Supported devices		Samsung's N/W Camera, Encoder, DVR/NVR
Maximum number of Media Gateways per system		Default 4 Media Gateway
Maximum number of Free NET-i ware per system		1 NET-i ware
Maximum number of cameras per Media Gateway		N/W Camera 72channels or DVR/NVR 288channels(36)
Maximum number of clients per Media Gateway		5 Clients
Modules		System Manager, Media Gateway, Console, Service Manager, Schedule backup

Configuration		
Language		Total 23 languages support English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek , Swedish, Danish, Finnish, Norwegian
System Requirement	Recommended	CPU Intel i7 (Sandy bridge) above RAM 4 GB above, Video memory 1GB above, HDD More than 20 GB of free space for installation. (For operation, the system log database requires 10 GB or more free space.), DirectX 8.1 above. Display resolution : 1,280 x 1,024 above, OpenGL compatible
	Minimum	CPU Intel Core 2 Duo 2.83 GHz above, RAM 2GB above, Video memory 512MB
	Operating System	- Console (Windows XP 32bit, Windows 7 32bit, Windows 7 64bit) - System Mananger, Media Gateway (Windows XP 32bit, Windows 7 32bit, Windows 7 64bit, Windows Server 2003, Windows Server 2008)

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